

# THE PHILIPPINE JOURNAL OF SCIENCE

D. GENERAL BIOLOGY, ETHNOLOGY  
AND ANTHROPOLOGY

VOL. VI

NOVEMBER, 1911

No. 5

## AN IFUGAO BURIAL CEREMONY.

By H. OTLEY BEYER.

*(From the Division of Ethnology, Bureau of Science, Manila, P. I.)*

AND

ROY FRANKLIN BARTON.<sup>1</sup>

*(From the Bureau of Education, Manila, P. I.)*

### CONTENTS.

#### PART ONE.—INTRODUCTION, BY BEYER.

- The Ifugao Clans and the Former Prevalence of Head-hunting.
- The Suppression of Head-hunting by American Authority.
- The Munhimang Burial Ceremony:
  - Sources of information.
  - The death and burial of Battang.
  - The death and burial of Kalatong.

#### PART TWO.—THE BURIAL OF BAHATAN, BY BEYER.

- The Life and Death of Bahatan.
- The Bringing in of the Body.
- The Ceremonies at the House.
- The Ceremonies on the Hill.
- The Burial.
- The After-Burial Ceremonies.
- The Liu-lua.
- The Vengeance Ceremonies.
- Conclusion.

#### PART THREE.—THE BURIAL OF ALIGUYON, BY BARTON.

- Aliguyon's Death at Kiangan.
- The Assembling of the People.
- The Ceremonies on the Hill.
- The Burial.

<sup>1</sup> Supervising teacher, Kiangan, Subprovince of Ifugao.

## PART I. INTRODUCTION.

The religious and public ceremonies of the Ifugaos of northern Luzon are probably as highly developed as any such ceremonies to be found in the whole Malay-Polynesian area, and their religion is so closely interwoven with the daily life of the people that its importance can scarcely be exaggerated. Every event of life is accompanied by its appropriate ceremony, and the greater the event the more elaborate the ceremony.

The purpose of this paper is to describe the ceremonies connected with the burial of beheaded bodies and the bodies of persons killed by hereditary enemies, whether or not their heads be taken. With the passing of the custom of head-hunting, these and all other ceremonies more or less directly connected with that custom will soon fall into disuse or materially change their form. It is desirable that an accurate record of them be made before they become wholly matters of hearsay and valuable details are lost. For this reason the authors offer no apology for here presenting a detailed account of such of these ceremonies as have come under their observation.

To understand the ceremonies clearly, some knowledge of Ifugao general customs is necessary. The most important facts are briefly set forth in the following paragraphs.

## THE IFUGAO CLANS AND THE FORMER PREVALENCE OF HEAD-HUNTING AMONG THEM.

The Ifugao people are divided into a large number of hereditary clans, each of which occupies a definite clan district and has a definite name. They vary in population from a few hundred up to four or five thousand people each, distributed in from ten to a hundred or more villages. In most cases, each clan is cut off from those surrounding it by natural barriers such as rivers, cañons, and mountain ranges. The people invariably call themselves by their clan name, with the prefix *i-* (equivalent to the English preposition "of"). Thus: *I-banauol-kami*, "We are (people) of Banauol clan"; *I-nagakáran-kami*, "We are (people) of Nagakaran clan". These clans were once wholly exogamic, as all members of the clan were believed to be descended from a common ancestral pair. Within recent years the exogamic feature has more or less broken down, and the whole clan organization is in the process of slow disruption.

Among these clans the institution of head-hunting grew up, in ages past. Each formed a little state, politically independent of all the other clans surrounding it, and making war or declaring peace with them, as it chose. In war, the head was regarded as a trophy, as was the scalp among the American Indians. The chief reason for desiring the head was not so much the excitement of the actual fighting to secure it, in which only a very few people took part, as the fact that the possession of a head was necessary before the great head-ceremony (or celebration of victory) could be held. This ceremony, in which all the people of the clan took part, was one of the three greatest given by the Ifugaos. It is not the purpose of this paper to describe it, but rather the exactly opposite one given by the clan of the beheaded man at his burial, the *munhimúñg*, which is also one of the three greatest Ifugao ceremonies.

## THE SUPPRESSION OF HEAD-HUNTING BY AMERICAN AUTHORITY.

The first task that confronted the American government in the Ifugao country was the unifying of the Ifugao clans, the establishment of peace among them, and the suppression of head-hunting. The rapidity and completeness with which these objects were attained after the organization of the Subprovince of Ifugao in September, 1908, has few parallels. No heads have been taken in Ifugao for more than two years past, nor has there been any fighting among the clans. About 450 kilometers of new roads and trails have been built which greatly facilitate communication between the various clans, and have been one of the chief factors in the development of the era of peaceful intercourse now in progress.

The better features of Ifugao culture will develop rapidly under these conditions, while many of the older customs will become much changed or entirely lost. To preserve the knowledge of them for future generations they must be studied and recorded at once.

## THE MUNHÍMÚŨŨ BURIAL CEREMONY.

*Sources of information.*—The writers of this paper have each resided for several years among the Ifugao people. The writer of this introduction witnessed, in whole or in part, four *munhímúŭŭ* burials in the Central Ifugao area, and Mr. Barton one in the Kiángan Ifugao area. Two of these ceremonies will be described very briefly, and two in full detail. The other will be mentioned only.

The sole previously published description of one of these ceremonies is that given by Jenks,<sup>2</sup> who, as a member of the party of Mr. Dean C. Worcester, arrived at Banaue in April, 1903, just in time to witness the burial of a beheaded man, but not the preceding ceremonies. The description is very brief, but the two plates<sup>3</sup> published with it are of interest. These plates are from photographs taken by Mr. Worcester at that time, and show the beheaded body in the procession and at the tomb. The pictures are typical of the ceremonies witnessed by the writer, excepting that usually 4 men in place of 2 carry the body in the burial procession. The statement that only about 20 men accompanied the body to the tomb<sup>4</sup> indicates that the beheaded man was of low rank in the community. The case is very similar to the first *munhímúŭŭ* ceremony that I witnessed; that of Manŭŭli of Panatŭgan who was killed and beheaded in an expedition against Kambulo clan, and was buried by Banaul clan on June 6, 1906. He was a serf of Tagtagon, the head chief of Banaul, who bore the expenses of the ceremony which was not very elaborate and was poorly attended.

## THE DEATH AND BURIAL OF BATTANŭ.

On June 30, 1906, Battanŭ, an Ifugao chief of great prominence, was killed at his house in the village of Bokos (clan district of Banaul) by an hereditary enemy from the clan district of Kambulo. Conditions were rather unsettled

<sup>2</sup> *Ethnological Survey Publications*, Manila (1905), 1, 182, 183.

<sup>3</sup> *Idem*, Plates CXXXV and CXXXVI.

<sup>4</sup> There is an error in Jenks' statement as to the number of men in this instance. [D. C. W.]

in Ifugao at that time and Battang's death created great excitement among the people. Nearly 5,000 persons from all parts of Central Ifugao and Western Ifugao attended the ceremony, and more than 1,500 men, fully decorated for the occasion, marched in the procession which conveyed the body to the tomb. This was the largest gathering of people for a similar purpose that I have ever witnessed in Ifugao. Through the misfortune of having exposed my last film a few days before the event I was unable to obtain photographs. The procession was very elaborate and required more than an hour to pass a given point. From 200 to 300 men attended the vengeance ceremonies held on the 6 successive mornings following the burial.

#### THE DEATH AND BURIAL OF KALATOŃG.

KalatoŃg of Kambulo (Plate I, fig. 1) was a man of very interesting character. He was born in Barlig, in the Subprovince of Bontok, and was of mixed Bontok and Ifugao parentage. He early won fame both as a warrior and as a diplomat, and married the daughter of a wealthy chief of Kambulo. As is common in Ifugao, he took up his residence in his wife's village, and soon attained much prominence in the Kambulo clan. This excited the jealousy of the other chiefs, who began to plot against him. Their plot was successful and late in the year 1905 KalatoŃg was imprisoned in Banaue on a charge later proved to have been false. When Lieutenant Jeff. D. Gallman (now Lieutenant-Governor of Ifugao) took charge at Banaue he carefully investigated KalatoŃg's case and completely exonerated him. During the investigation, at which I was present, KalatoŃg made the most remarkable speech in his own defense that I have ever heard made by any Ifugao. He held even his enemies, who filled the room, spellbound. After KalatoŃg's release he attained to a power which up to that time no other Ifugao chief had ever possessed. He completely dominated the clans of Kambulo, Batad, Talbok, and Ginihon, containing more than 12,000 people. However, in acquiring this great influence he made many enemies, and some of them very bitter ones. He was a man with a very highly developed sense of justice, and ruled his people with tact, diplomacy, and courage, going alone into the most dangerous places. This eventually brought about his death, for he was so just in his dealings with the people and with Lieutenant Gallman that his enemies decided that the only way they could rid themselves of his rule was by killing him. In January, 1908, three men of Ginihon clan treacherously speared and beheaded KalatoŃg while he was bathing in the Ginihon River. As Ginihon clan had been very inimical to Kambulo before they were conquered by KalatoŃg, they immediately made the latter's death the occasion for a great head ceremony. However, they dared not keep the head, for fear that the combined vengeance of Kambulo and the powerful town of Barlig would wipe them out completely. They opened negotiations at once, and returned the head to Kambulo from whence it was brought to Banaue. The photograph for Plate II, fig. 1 was taken by me at Lieutenant Gallman's house on the day the head was brought in. It was raining heavily and the negative is poor. So far as I know this is the first and only negative of a freshly-taken head ever made in the Mountain Province, and for that reason a print from it is here reproduced. A disabled foot prevented my attending the great ceremonies at the burial of KalatoŃg's body, but they were graphically described to me afterwards by Lieutenant Gallman.

The burial ceremonies on all above occasions were, with the exceptions noted in the text, similar to those given at the *munhimunŃg* of Bahatan, now to be described.

PART II. THE BURIAL OF BAHATAN.<sup>5</sup>

## THE LIFE AND DEATH OF BAHATAN.

Bahatan of Anḡádal was in early life a serf of Tanḡḡána,<sup>6</sup> one of the wealthiest and most popular village chiefs of Banaul clan. When the first Americans came to Banaue, Bahatan found employment with them, and proved exceptionally faithful and intelligent. His employment was remunerative and he was soon able to redeem the mortgaged rice terraces inherited from his father. He then married a well-to-do girl with several fields of her own, and became a substantial middle-class citizen. In 1907 he was enlisted in the special Ifugao police. These Ifugao policemen hold responsible positions, but Bahatan proved fully equal to the work and soon became the most trusted and capable man at the Banaue station.

On March 31, 1908, Bahatan went to a village in Namulditaṅ district on a matter of business connected with the roadwork then in progress. Having accomplished his errand before noon, he was resting under the house of the village chief when a man of the Liṅḡai clan came up. Liṅḡai had not then been brought under governmental control, and was still at war with Banaul. Moreover, the man in question had lost several ancestors and relatives in fights with the Banaul people. He at once determined to kill Bahatan. He approached him with fair words, drawing his blanket closely around his body to conceal his bolo, and offered Bahatan a betel nut which the man from Liṅḡai intentionally dropped upon the ground. As Bahatan stooped to pick up the nut the man quickly threw off his blanket and with two well-directed blows of his bolo severed Bahatan's head from his body. The man did not stop to take the head. Before the people in the vicinity fully realized what had happened, he had vanished in the *runo*<sup>7</sup> thicket surrounding the village, eventually escaping safely to Liṅḡai.

## THE BRINGING IN OF THE BODY.

There was great excitement and grief in Banaul when the news reached us. Several hundred armed warriors assembled within a few hours, ready to go after the body and look for a fight on the way. However, Lieutenant Gallman would not let them go, although he had some difficulty in restraining the warriors. Only the wife, mother,

<sup>5</sup> By H. Otley Beyer.

<sup>6</sup> See figure on left, in Plate V.

<sup>7</sup> *Runo*, a species of large grass, common throughout the Philippines. Ifugao name: *biláu*. Scientific name: *Miscanthus sinensis* Andr. (Gramineae). This and following plant identifications were made by Elmer D. Merrill, botanist of the Bureau of Science, from specimens collected by the authors.

and a few near relatives of the dead man were allowed to accompany the detachment which was sent at once to recover the head and body. This object was accomplished without trouble as both had been cared for in the village where the killing had occurred. The party came back too late that night to allow me to take separate photographs of the head and body, or of the returning people. The picture shown in Plate IV, fig. 1, was taken on the following morning, after the head had been replaced upon the body and securely tied to the shield and post against which the body lay. It would have been a serious sacrilege to have asked for its removal then.

During the absence of the expedition, religious ceremonies were performed in every village in Banauol where the requisite priests could be had. The purpose of these ceremonies was to insure success for the expedition, and the classes of beings principally invoked were the *a-ámûd* (ancestral souls) of Banauol clan and the *halupe* (tormentors and go-betweens). Thousands of the ancestral souls were called upon by name in the various villages, particular attention being paid to famous warriors and brave fighters of the past. These were counselled to aid those who had gone out to get the head and body, and to prevent the *a-ámûd* of the Liñgai people from injuring them or placing obstacles in their path. The tormentors were urged to torment the Liñgai warriors with blindness and dizziness and to fill them with fear, so that they would not attack the rescue party. The only gifts offered the spirits during these ceremonies were small chickens, rice-wine (where it was obtainable on such short notice), betel nuts, and betel leaves. However, great gifts of hogs and other things were promised if the expedition proved successful.

The procedure of the returning party was as follows: The body and head were securely bound on the dead man's shield, which had been taken along for that purpose, and the whole suspended from a long pole borne on the shoulders of four men, two in front and two behind the body. Immediately in front of the pole-bearers walked two men, one of whom beat a sharp tattoo at regular intervals upon his shield with the handle of his spear, while the other played the *bañyiban̄y*.<sup>\*</sup> The relatives of the deceased, except the wife and mother, followed in single file behind the pole-bearers. In former times a long line of warriors would have preceded the party, but in this case that service was performed by the detachment of Ifugao soldiers that accompanied it.

<sup>\*</sup> The *bañyiban̄y* is a musical instrument of very hard and resonant wood which is beaten with a short stick also of hard wood. On a still day the sharp, clicking beat of this instrument can be heard miles away. It is used only in death ceremonies and in the ceremonies for the cure of very serious illness. (See Plate I, fig. 2.)

The wife and mother walked beside the corpse, at times throwing their arms around the bloody body and weeping violently. At other moments they stared into the gruesome features of the head and cried out: "Bahatan! Bahatan! Come back, come thou back!"<sup>9</sup> Occasionally the whole party broke forth in the Central Ifugao death-call: "Oh! Bahatan! Come back, come thou back, for our houses are filled with mourning!"<sup>10</sup> In fact, grief was the keynote of the occasion. Vengeance did not become predominant until the following day.

#### THE CEREMONIES AT THE HOUSE.

A group of people of considerable numbers, among whom were several priests and village chiefs, were gathered at Bahatan's house when the party returned. As soon as the cries, which filled the air for fully twenty minutes, had quieted down, two old priests made a short *baki* (religious ceremony) in the house, sacrificing a chicken to the *bagol* (great deities) of the Sky World. Immediately upon completion of this ceremony, the omen being good, the preparation of the body began. Everything was arranged as shown in Plate IV, fig. 1, in which position the body remained until it was removed for burial on the third day. The body faced Liŋgai, the murderer's clan district, and rested against the shield on which it was carried in.<sup>11</sup>

During this preparation of the body certain things were also being done by some of the old women to the widow, mother, and brother of the deceased. The clothing and ornaments of the latter were all removed and they were arrayed in old, torn garments made of coarsely-woven bark fiber, such as are worn by the poorest serfs when working in the fields. (See Plate VI, fig. 1.) Rings and bands of woven rattan, called *nguhu*, were placed upon their arms and the calves of

<sup>9</sup> "Bahatan! Bahatan! Mabánŋa-bánŋad-ka!" The grief of an Ifugao wife or mother over the dead body of her husband or son is something that no one can look upon untouched. I know of no people who exhibit stronger family affection.

<sup>10</sup> "Bahatan-ah! Mabánŋa-bánŋad-ka! ta nalagidan di bale-tuu!" This death-cry in Central Ifugao is set up by all the people of the village at the death of any person, and is repeated for from ten to thirty minutes. The name of the dead person is of course changed in each case.

<sup>11</sup> The wooden spear, in the picture, standing beside each of Bahatan's arms, and the little carved wooden ornament suspended from his neck, are of particular interest. The wooden spears, which are really throwing javelins, are called *tukáb* and consist of a pointed bamboo head set in a hard wood shaft. The *tukáb* is undoubtedly the oldest form of Ifugao spear, dating from long before the introduction of metals. It is still largely used in real fighting. The little wooden ornament suspended from Bahatan's neck is called *kinillo* and indicates that he was *lôhóp*, that is, a brave warrior who has taken heads in his lifetime. At the burial of Marŋŋili, mentioned in Part I of this paper, no *kinillo* was suspended from his neck as he had never taken a head.

their legs. Larger bands of the same sort were also worn by the brother upon the crown of his head and by the women around their necks. Earrings made of small cross-sections of *runo* stalks were placed in their ears, and the widow also wore a necklace made of the same material. The faces, arms, and legs of all three were then rubbed with a mixture of soot and ashes, and in this condition they remained for the next three days. During that time they ate no food and drank very sparingly of water. The widow and mother were prohibited from bathing for a full month after Bahatan's death, and the brother for ten days after the burial. Certain articles of food were also taboo to them during this period. They might not mix much with other people nor go on long journeys from home. Neither were festivities of any sort to be held in the house nor participated in. For her full twenty-eight days of mourning, the widow continued to wear her coarse clothing, and also wrapped around her head (in the manner shown in Plate VI, fig. 3) a striped blanket.<sup>12</sup>

A number of the other relatives and very near friends of Bahatan also removed their ornaments and wore ear-rings or necklaces made of pieces of *runo* stalk. These people also ate little and did not bathe until after the burial. However, in their case it seems to have been purely a voluntary and personal matter. Continence is maintained among young and old throughout the clan district of the beheaded man during the three days between the death and burial, and by some of the nearer relatives during the six succeeding days. This taboo is said to be very rigidly adhered to.

After everything had been prepared, conditions remained practically unchanged during the following two days. Fifteen or twenty men, with their spears and shields always within easy reach, remained under or around the house at all times. They were relieved at frequent intervals, and there was a constant coming and going. Many people came simply to view the body, to get first hand information regarding the fight, and to learn what revenge was planned. The calling on the soul of the dead man never ceased. At intervals of every two or three minutes, both day and night, an old woman approached the body and poking at the severed neck with a slender stick about 80 centimeters long she cried to the soul to return and avenge itself. Several old women relieved one another in this duty. Occasionally, an old priest approached and addressed the body with a long tirade to the same effect. Once in an hour, perhaps, the widow or mother emerged from the little hut where she sat, and throwing her arms around the corpse wept most piteously, crying to the soul to "come back! come back!"; or, shaking the body violently, she cried: "Wake up! Bahatan! Wake

<sup>12</sup> Called *hapi*. This headdress when thus worn is called *bahu*.



up!<sup>12</sup> During this time, also, until the morning of the third day, an almost constant ceremony was held in the house. Two or three priests relieved one another at long intervals. I have not yet obtained the text of those house ceremonies and can say little about them except that their general purpose was to keep the soul of the dead man, the ancestral souls of the clan, and other friendly spirits always near at hand. This was probably both for present protection and in preparation for the great ceremonies to follow on the third day.

#### THE CEREMONIES ON THE HILL.

At earliest dawn on the morning of the third day a party of men proceeded to a small level plateau lying about 400 meters west (toward Liñgai) and 90 meters above Bahatan's house. They cut down the tall grass on a place from 60 to 90 meters across, and built a small grass shelter on the south side of this clearing. Around this shelter, and enclosing an 8-meter space in front of it, they planted a circle of bunches of green *runo* stalks with the leaves left on. Soon after sunrise five priests came, bringing with them various of the sacred objects and paraphernalia used in religious ceremonies. Others arrived at intervals during the next hour until the final number of priests was sixteen, including all those of highest rank in Banaul clan. They took up their station within the *runo*-enclosed circle, and after the beginning of the ceremony it was taboo for any other person to step within that circle.

From 8 o'clock until 10 o'clock the people began to gather for the great ceremony of the *mankimûñg*, until more than 2,000 were in the vicinity of the plateau. They came in parties of from 20 to 200 people each, from all the clans at peace with Banaul within half a day's journey about. The procedure in the case of each party was the same as that so well described by Barton in Part III of this paper, and I shall not give it in detail here. The men who were to take part in the burial procession always led, while the women and children followed in a group at the rear. The striped shields, the *bañgibañg*,<sup>14</sup> and the headdresses are well shown in Plates I, II, and IV. The white markings on the shields are painted with a mixture of lime and water. The white bark band of the headdress holds the blood-red *dañgla*<sup>15</sup> leaves in place. Everyone was dressed in his or her finest

<sup>12</sup> "*Bumáñyon-ka! Bahatan! Bumáñyon-ka!*"

<sup>13</sup> See footnote No. 8.

<sup>14</sup> *Dañgla* is *Cordyline terminalis* Kunth. (Liliaceae), and is the most important and most used of the sacred plants of the Ifugao. Large quantities of it are planted on the walls of the rice terraces (See Plates III, VII, and VIII). These spots of crimson color attract every traveler's attention, as they form the most striking ornament on the giant stairways of terraces that run up the mountainsides almost to their very tops.

clothing and ornaments and the parties certainly presented a striking appearance as they slowly wended their way into the valley. At times a dozen of them were in sight, coming from different directions, and the beating of the wooden musical instruments could be heard for miles.

In Central Ifugao the parties do not go to the house of the dead man unless their path leads them by it, but proceed at once to the plateau or hill upon which the ceremony is being held. In the present case, as each party approached the plateau the women and children dropped out and only the men who were to take part in the procession went on. The men trotted with a swinging dance step onto the plateau, playing their *banjibanj*<sup>16</sup> rapidly, and passing once around the circle of *runo* clumps came to a halt beside it. The leader communicated with the priests within the circle, and they assigned him his position in the procession. Upon learning this the party broke up, the members wandering off singly or in groups to find their assigned places.

In the meantime, since 10 o'clock, the religious part of the ceremony had been in progress. Two hogs and several chickens were necessary for the sacrifice, and on the present occasion one of the hogs was contributed by Lieutenant Gallman and the other by myself. This was eminently proper, for Bahatan had died in our service, and, to the Ifugao, Lieutenant Gallman stood in the relation of his overlord. The chickens, rice, and other things necessary were contributed by the family of the deceased and by Tasiigana, his former overlord. The hogs and chickens were placed in the little grass shelter, already referred to, to await the time when they would be needed.

The first ceremony for the securing of vengeance is called *munubub*. Two chickens were sacrificed in the ordinary manner, after a short religious ceremony.<sup>17</sup> Their meat was then cooked in one pot and some rice in another. Several pieces of the cooked meat were tied in various places on the roof of the little grass shelter, and others were placed in a small basket which was tied in the top of one of the *runo* clumps near which the priests sat. At the foot of this clump five small wooden bowls were placed, and filled, one with the chicken's blood, two with chicken broth, and two with the rice drink (*bubud*). All of these articles were carefully watched by the priests from the time they were so placed until high noon, when the ceremony ended. This was to learn the will of an *idu*, or omen spirit which usually manifests itself in the form of a little bird called *pitpit*.<sup>18</sup> If one or more of these birds comes to eat of the meat or drink of the liquids

<sup>16</sup> Wooden musical instruments, see p. 232.

<sup>17</sup> *Baki*, see p. 233.

<sup>18</sup> *Prionochilus* sp.

in the bowls, it is a very favorable sign. Had that occurred in this case, the hogs would have been sacrificed immediately in the vengeance ceremony and on the following night a party of warriors would have started for Lingai. However, no *idu* appeared at the ceremony for Bahatan, and to make clear what really did occur it is necessary here to describe briefly a few of the general beliefs regarding the omen spirit and the significance of its appearance at the *munhimūng* ceremony:

Most of the omens are unfavorable, and whenever an omen spirit appears, its every movement is watched with anxiety. Of special significance are the direction of its flight and the character of its cries. If it flies slowly overhead in any direction away from that of the inimical clan, at the same time uttering a low mournful cry, it is a bad sign; but if it flies rapidly to the rear of the observers, uttering a sharp cry of fright, it is the worst sign of all. Either of these things indicates that vengeance will not be obtained for some time to come, and that any war party sent out at once would surely meet with disaster. Many other things may be learned from the *idu*—but it sometimes happens that none appears before 12 o'clock, as was the case at Bahatan's *munhimūng*. This is not taken as a bad sign but merely indicates that the time is not ripe and that a series of vengeance ceremonies must be held on the days following the burial.

#### THE BURIAL.

At all *munhimūng*, no matter how the ceremonies on the hill turn out, the burial in no case is delayed—it always begins exactly at noon. The time is determined by the Rice Chief<sup>15</sup> of the clan. The Rice Chief of Banaul is Bundinlan of the village of Ambálu. At the ceremony for Bahatan he sat with the priests in the *rano*-enclosed circle on the plateau, and shortly after 11 o'clock he removed from his hip-bag five little wooden pegs which he thrust in the ground in a vertical position. From watching the shadows cast by these pegs he was able to determine when the sun had reached the meridian. Even had the day been cloudy he would have guessed the hour with great exactness.

As noon approached, the men who were to take part in the procession sought their assigned positions, and when Bundinlan rose to announce the hour a long line of nearly a thousand men in single file reached from the plateau to a point far beyond Bahatan's house. A few minutes before 12 o'clock, the priests sent eight men down to the house to prepare the body by tying it on a pole in the same manner in which it had been tied when brought home. They also sent several other men to open and prepare the tomb and cut the grass around it.

<sup>15</sup> The Rice Chief is called *tumánók* in Central Ifugao and *muniapu* in Kinaangan Ifugao. In the former area the position is nearly always filled by a man, in the latter either by a man or a woman. The Rice Chief is the astronomer and meteorologist of the clan, in addition to being its leader in agriculture. The *tumánók* of Central Ifugao have considerable astronomical knowledge and have evolved an excellent calendar.

Exactly at noon Bundinlan spoke to the priests and they all stood up together, shouting at the tops of their voices: "Attention! ye Deities of the Sky World, for we are about to bury a beheaded man!"<sup>20</sup> This cry was taken up and repeated throughout the whole line of waiting men, and they fairly made the hills ring with their shouts. Six of the highest ranking priests at once left the plateau and went to the house, from which place, after glancing at the body to see that it was all right, they proceeded to the head of the procession. Each of the three leaders carried two spears and wore a peculiar back-basket of the type called *i-nâb-nû-tan*.<sup>21</sup> The three following priests each carried a spear and a shield. They advanced very slowly, dancing all the way a peculiar dance which represented a mimic fight. This was accompanied by much low-voiced muttering and occasional loud cries. About half of the men in the procession carried shields and the other half *banjibanjy*. The tattoo upon the shields and the playing of the wooden musical instruments was kept up all the way from the house to the tomb. For the greater part of the distance the body was carried about midway in the procession, but as they neared the tomb the men carrying it advanced to a position just behind the leading priests. The women, children, and men not taking part in the procession stood in scattered groups and lines on the hillsides and along the walls of the rice terraces, where they could get a good view of the proceedings. The wife and mother of the dead man were the only women in the procession. They followed just behind the body.

Men for whom the *munkimûnjy* ceremony is performed are not buried in ordinary graves, but in large tombs called *gunjât*, hollowed out in the mountain-side.

These tombs are from 6 to 8 meters across and about 1 meter high. The roof is supported by pillars of earth or stone which are left at frequent intervals. There are 6 of these tombs in Banauol clan district. The opening is walled up with stone, and in front of each a quick growing tree called *kanâ'î*<sup>22</sup> is planted. The rate of growth of this tree is known, and it is cut off near the ground each time a burial is made. The people are thus easily able to tell when the last burial was made in that tomb.

The distance from Bahatan's house to the tomb where he was buried is about 3 kilometers, and the procession was fully an hour and a half in reaching its destination. When the leaders had arrived at the place, the procession halted and those in the rear began slowly to disperse.

<sup>20</sup> "*Gôpa-gôpan dakayun Bagol ad Days, ta munkimûnjy kami!*"

<sup>21</sup> The appearance of the priest wearing this basket is extremely grotesque. The basket is covered with long black needles made from fern-tree roots, and as the priest stoops in the dance these needles stand erect all over his back like the bristling quills of a porcupine.

<sup>22</sup> Also sometimes called *tuñgôb*. I do not know the scientific name.

About twenty of the men immediately behind the leaders advanced and removed their headdresses which were then strung on two short poles, cut from the *hanâ'ti* tree at the mouth of the tomb, and stood up one on each side of the passage which led at a sharp angle downward into the tomb. The body was then brought forward, removed from the shield, and carried into the tomb. The passage was so small that those who entered were forced to crawl on their hands and knees. The body was not wrapped in a death blanket, but was dressed only in an ordinary clout. It was placed in a sitting posture at one side of the tomb, facing *Lingai*, and held in position by wooden stakes cut from the *hanâ'ti* tree previously referred to. After everything was prepared two men again walled up the mouth of the tomb.

During all the time that the burial was taking place, and until the wall was almost finished, the widow, mother, and brother of the dead man stood at the beginning of the passage and cried out to him with loud voices. They alternately asked him to come back, and to avenge himself. After everything was finished they quietly went home, where they remained in comparative seclusion during their period of mourning previously described. After the walling up of the mouth of the tomb the poles containing the headdresses were laid over it, and a *tukâl* (wooden spear) stuck in the ground at right-angles to the slope. The people then quietly dispersed, and the *munkimûñg* ceremony was finished.

#### THE AFTER-BURIAL CEREMONIES.

Although the *munkimûñg* ended with the burial of the body, the after burial ceremonies, while not so spectacular nor attended by so great a number of people, were even more curious and interesting. They were of two kinds very different in character, -the *liu-liua* (or ceremonial nights of general license) held on the three nights following the *munkimûñg*, and the vengeance ceremonies held at sunrise on the six successive mornings following the burial.

#### THE LIU-LIUA.

Before returning home, all of the men of Banauol clan who had marched in the burial procession took a ceremonial bath. The period of enforced continence was now at an end. That night in every village of Banauol there were little ceremonial gatherings of men and women at the houses of the *kadañgyan* (nobility). These gatherings are called *liu-liua*, and there are present at each from ten to forty or fifty guests. The people are invited by one of the nobility, who also provides sufficient *bubûd* (the fermented rice-drink), betel nuts, betel leaves, and tobacco to last throughout the night—for the gathering does not break up until early dawn. The number of men and women is usually about equally divided, and all are young or middle-aged, mostly coming from the nobility

and middle classes. Children and old people do not attend. The gathering is held on the paved place, called *darúlon*, underneath the house, and usually begins at about 8 or 9 o'clock in the evening. The host as a rule sits in the center beside the jar of rice-drink and the baskets or bowls containing the betel nuts, leaves, and tobacco. A small fire of pitch pine, both for light and warmth, is also built near the center. In the earlier part of the evening the women usually gather in a group on one side of the fire while the men sit on the other, but by midnight or after, when all have become warmed with the wine and the fervor of the songs, they mix together freely. No person is responsible for anything that he or she may do at a *liu-liua*, and no enmities or hard feelings are ever retained.<sup>23</sup>

The principal purpose of the gathering is the singing of certain ceremonial songs, and this is kept up during the whole night. The songs are of two distinct types: the *a-ápôx di gimaiyañg* and the *munhú-liua*. The former are of mutual criticism on the part of the men and women, and the latter are of love and war. The latter are sung at all *liu-liua* ceremonies, throughout the year, and are in a curious, secret language utterly different from the spoken Ifugao.<sup>24</sup>

The *a-ápôx di gimaiyañg* are sung only after the *munhú-mûñg* ceremony, and never at *liu-liua* held on other occasions. They are in the ordinary spoken language and, unlike most Ifugao songs, are not sung by a leader and chorus but by all the men singing together in one group and the women in another. The following extract from one of these songs was obtained at the house of Kinngingán of Pasnakan, on the second night after Bahatan's burial, and will show their general character. It is given both in the original<sup>25</sup> and in a free translation:

<sup>23</sup>The Ifugaos ordinarily have a very strict moral code, and the crime of adultery is punishable by death, but there is no doubt that formerly general license of every sort was permissible at a *liu-liua*. At the present time improper intercourse is very much frowned upon, and the younger married people will not attend a *liu-liua* where anything improper is liable to occur.

<sup>24</sup>This secret language is used only in certain religious and ceremonial songs, such as the *munhúñgat* of the Central Ifugao priests and the *munhúdhûd* harvest song of the Kiángan women. It is so different from the spoken language that I have listened to it for hours without being able to recognize a single word, except an occasional proper name. Indeed, the Ifugaos themselves have largely forgotten the meaning of these words. They know the general meaning only, and can not translate it word for word into the spoken language.

<sup>25</sup>*A-ápôx di Gimaiyañg.*

MEN. *Dakyu hi binaban le-le-á-lin-um-an isda yu giniñga-yu hi nan payo, le-le-á-lin-um-an.*

WOMEN. *Dakyu hi linalaki, le-le-á-lin-um-an, ya isda yu hi wanguwag di inu-gádiu yu, le-le-á-lin-um-an.*

MEN. *Dakyu hi binaban, le-le-á-lin-um-an, ya e ipipluk hi payo di giniñga-yu, le-le-á-lin-um-an.*

*A apōx di Gimaiang.*

MEN. "Ye the women, *le-le-á-lin-um-an*, ye eat of the shell-fish ye have captured in the rice-fields *le-le-á-lin-um-an*."

WOMEN. "Ye the men, *le-le-á-lin-um-an*, and ye eat at the river the fish ye have captured, *le-le-á-lin-um-an*."

MEN. "Ye the women, *le-le-á-lin-um-an*, and ye cook upon the walls of the rice-fields the shell-fish ye have captured, *le-le-á-lin-um-an*."

WOMEN. "Ye the men, *le-le-á-lin-um-an*, and (when ye go on a journey) ye eat your elouts upon the path, *le-le-á-lin-um-an*; and ye do not return to your homes, *le-le-á-lin-um-an*; and (because of that) your children are weeping, *le-le-á-lin-um-an*."

MEN. "Ye the women, *le-le-á-lin-um-an*, and ye do not go to your sweet-potato fields, *le-le-á-lin-um-an*; and (because of that) your husband becomes lank and lean, *le-le-á-lin-um-an*; because he has not eaten of the results of your planting, *le-le-á-lin-um-an*."

WOMEN. "Ye the men, *le-le-á-lin-um-an*, and the meat (ye have obtained at the feasts ye have attended) decays in your hip-bags, *le-le-á-lin-um-an*; for ye forget to remove it when ye return to your homes, *le-le-á-lin-um-an*; and there is no meat-food in your houses, *le-le-á-lin-um-an*; and a stench arises from the meat in your hip-bags, *le-le-á-lin-um-an*."

Etc., etc.

These songs of mutual criticism are sung during the first half of the night, and the other class of songs occupy the remainder of the time. The attendance on the second and third nights of the *liu-liu* is not so large as on the first night, and is frequently composed of different people. Considering their character, the conduct of these ceremonies is very orderly. There is seldom enough of the intoxicant to produce much drunkenness, other than the required "joyful" feeling, and there are no public obscenities. In many districts of Central Ifugao these ceremonies are now no more than an ordinary social gathering and *Sängerfest*.

## THE VENGEANCE CEREMONIES

The vengeance ceremonies are very different in spirit and character from those just described, and it was possibly to counteract their frenzied ferocity that the latter were invented. They are called *mung'imu-gáman*, and really last for seven mornings, since the one held on the morning of the burial day is essentially the same in purpose as those held on the

WOMEN. *Dakyu hi linataki*, *le-le-á-lin-um-an*, *ya isda-yu nan dalan di wana-x-yu*, *le-le-á-lin-um-an*; *yu meid idatanngyu bala-yu*, *le-le-á-lin-um-an*; *ya han tumdanng da nan imbabale-yu*, *le-le-á-lin-um-an*.

MEN. *Dakyu hi binabati*, *le-le-á-lin-um-an*, *ya meid idatanngyu binabati-yu*, *le-le-á-lin-um-an*; *ya din napigat nan ahawca-yu*, *le-le-á-lin-um-an*; *di meid di kanona di binabati-yu*, *le-le-á-lin-um-an*.

WOMEN. *Dakyu hi linataki*, *le-le-á-lin-um-an*, *ya mapito de dotag hi butanng-yu*, *le-le-á-lin-um-an*; *addi-kayu ukaton hi bala-yu*, *le-le-á-lin-um-an*; *ya meid di isda-yu hi baley*, *le-le-á-lin-um-an*; *ya humamu hamó di dotag hi butanng-yu*, *le-le-á-lin-um-an*.

Etc., etc.

six following. The true vengeance ceremony is not held until the omen spirit appears with the decree of fate. Should it appear with a favorable decree on the morning of the burial day, vengeance will be obtained very soon; but if on any of the following six days, it is held that vengeance will be obtained in as many months as the number of days waited. Should it not appear at all during these days, it is doubtful if vengeance will ever be obtained.

At the vengeance ceremony for Bahatan the omen spirit appeared at about 7 o'clock on the third morning after the burial, and ate of the meat and blood. Therefore, it was held that vengeance would be obtained within three months. (As a matter of fact this prediction came true.) The ceremonies on the first and second days were the same as those at the *munúbúb*<sup>26</sup> held on the morning of the burial day, except that the time was from sunrise to about 7.30 o'clock instead of from 10 o'clock until noon. Also, from 50 to 100 young men were present who from time to time sang vengeance songs and songs addressed to the omen spirit asking him to come quickly. When the *idu* appeared in the form of a small bird<sup>27</sup> everyone remained silent until it had finished its meal and flitted away in the general direction of Liñgai. The priests then all arose and shouted a few words after the departing spirit. The young men returned to their homes, to spread the news, while the priests immediately proceeded to the house of Bukahan (the brother of Bahatan) in the village of Dimpul, where the two hogs had been taken on the afternoon of the burial day. The most interesting ceremony of the whole series then took place, but as it is described in detail by Barton in Part III of this paper, I will mention it only briefly, putting in the few details in which the Central Ifugao ceremony differs from that of Kiángan Ifugao.

The ceremony was addressed principally to the great deities of the Sky World (*Ad Daya*) and the Upper World (*Ad Kalánian*), who are the gods of war and fighting. The most important of these deities are: *Manahant* (the Deceiver), *Amalgo* (the chief of the Sun Gods), *Ambulan* (the chief of the Moon Gods), *Lubog*, *Pawit*, *Halaniyob*, *Amtalu*, *Amtilag*, etc. Various of the priests were possessed by these deities. *Amalgo* speared the pig and *Ambulan* threw himself upon it, drinking the spurting blood until he was pulled away. Several of the priests seized handfuls of the blood and smeared themselves from head to foot. The pig was still living, but was soon killed in the ordinary manner by piercing its heart with a sharpened stick (the *iwituk*).<sup>28</sup> After the hair had been burned off, the body was cut up with scant ceremony and a small portion cooked. The meat was divided among the priests and the near relatives of Bahatan.

<sup>26</sup> Where the chicken meat, blood, broth, and rice-wine were prepared for the coming of the *idu*.

<sup>27</sup> *Pit-pit*, see p. 236.

<sup>28</sup> This is apparently not the custom in Kiángan Ifugao, as there the spear is thrust through the pig's heart, killing it immediately.



One hog was killed in the forenoon and the other in the afternoon of the third day. On that same afternoon a large shallow pit, about 3 meters square and 1 meter deep, was dug on the plateau where the ceremonies of the previous mornings had been held. The ceremonies of the fourth, fifth, and sixth mornings took place around this pit, and were all alike. From two to three hundred young and middle-aged warriors with spears and shields danced a mimic battle and sang songs of vengeance from sunrise until about 7 o'clock. At the same time two old priests sat in the center of the pit, where a small fire was built, and performed a religious ceremony over some of the meat of the hogs killed on the third day. The warriors danced and sang themselves into a frenzy disquieting to look upon. Some women and children who had gone up to the plateau on the fourth morning ran away in flight when the dance reached its height. After this ceremony the men returned home thoroughly exhausted and did little or no work on that day.

## CONCLUSION.

The completion of the vengeance ceremonies likewise completes the observances connected with the *munkimâñg* burial. The people believe that the souls of men buried by this ceremony lead most unhappy lives. They are forced to wander about, for a time at least, among the war gods and great evil deities of the Sky World (*Ad Daya*) and the Upper World (*Ad Kabúnian*). It is far from being an honor to have one's head taken. In fact, to the Ifugao, it is the greatest of all misfortunes.

PART III. THE BURIAL OF ALIGÚYUN.<sup>2</sup>

## ALIGÚYUN'S DEATH AT KIÁÑGAN.

Aligúyun, of the district of Nagakaran in Kiáñgan Ifugao, was a soldier in the constabulary company stationed at Kiáñgan. He was killed while on duty, May 2, 1910, by a prisoner in the guardhouse who had secretly obtained a weapon. This prisoner had determined to escape and would have killed anyone who barred his way had he not been immediately shot by one of the other soldiers.

The killing of Aligúyun was therefore not done for revenge; in fact, his murderer probably did not know who he was nor where he was from. However, it so happened, that the prisoner himself was from the district of Kurúg, which is about 10 or 12 kilometers distant from Nagakaran, the home of Aligúyun. Old feuds existed between nearly all the clans in this area, and Nagakaran and Kurúg were not exceptions.

Since the suppression of head-hunting in Ifugao, it has become a

<sup>2</sup> By Roy Franklin Barton.

general custom to accord the *munkimũng* burial to all persons killed by members of inimical clans, and this custom was followed in the case of Aligúyun. I witnessed only the ceremonies of the third day, and the following narrative of the events of that day was written shortly after their occurrence.<sup>30</sup>

#### THE ASSEMBLING OF THE PEOPLE.

On the third day after Aligúyun was killed, the principal funeral ceremonies took place. To these ceremonies came a number of people from their *rancherías*,<sup>31</sup> the party of each *ranchería* being led by relatives of the dead man—some of them very distant relatives.

Nagakaran, the *ranchería* of Aligúyun, was until quite recently very unfriendly to Kiánġan, where I live. However, Aligúyun had some kin in Kiánġan and these, together with their friends, went to the funeral. Their shields, as well as the shields of all who attended, were painted with white markings, some taking the conventional form of men, some of lizards, and some were zigzag. (Plates I and II, fig. 2.) Each man who attended had a headdress made of the leaf petiole of the betel-nut tree and the red leaves of the *dánġola*<sup>32</sup> plant. To each leaf were attached pendants of feathers. Mourning bands, made of strips from the same petiole, were tied around both arms and legs, and in some cases a pendant *dánġola* leaf was attached to each band. Every man was dressed in his best cloth and the women in their best skirts and in all their finery of gold ornaments and agate necklaces.

Nagakaran village is one of several in a very large valley (Plate VII). When I reached a point in the trail commanding this valley there could be seen coming from each of the various villages a procession wending its way slowly toward Aligúyun's home. From the time when it came within sight of the house, which was sometimes at a distance of from 2 to 3 kilometers, each procession danced its way, beating on the striped shields with drum sticks, and on the *banġibang*, a wooden stick made of hard resonant wood<sup>33</sup> coated with chicken blood and extremely old

<sup>30</sup> At the request of Major Willcox, United States Army, who was in Kiánġan at the time of Aligúyun's death. Some corrections and minor changes have been made in the text.

<sup>31</sup> The word *ranchería*, as used in the following pages and as commonly used by the American officials in Ifugao, designates what Beyer terms *clan district* in Parts I and II of this paper.

<sup>32</sup> The Kiánġan Ifugao name for *Cordyline terminalis* Kunth, (Liliaceae), previously described.

<sup>33</sup> The *banġibang* is usually made of *tú-ol*, an extremely heavy dark red wood. The specific name of *tú-ol* is *Bischofia javanica* Bl. (Euphorbiaceae). There are both wild and cultivated varieties.

This stick is curved slightly, is about 60 centimeters long, and is held in one hand suspended by a rattan string so that the vibrations are not interfered with. It is beaten with a drum stick as is also the shield. The *gangha*, or bronze gong, is never used in the funeral of a beheaded man.

Each of the two head men of each procession carried two spears. Behind the head men came a man carrying spear and shield. The two men in front faced the oncoming procession, stepping most of the time backward, and making thrusts toward the bearer of the spear and shield. The latter returned the thrusts and executed various "fancy steps," the whole being a dance which in some respects resembles one of the head-dances of the Bontok Igorot. From the high place on the trail all moved slowly along the walls of the rice terraces toward the central village. The columns appeared in the distance like gigantic centipedes or files of ants. It usually takes an hour for such a procession to cover 1 mile. It was a still morning and the beating of shield and stick could easily be heard across the wide valley.

Arriving at Aligúyun's house we found him sitting on a block facing the sun, and leaning against his shield which was supported by the side of the house. The body was in an advanced state of decomposition. It was swollen to three times its living girth. Great blisters had collected under the epidermis which broke from time to time, a brownish-red fluid escaping. The spear wound in his neck was plugged by a wooden spear-head. In each hand Aligúyun held a wooden spear. No attempt whatever had been made to prevent decomposition of the body or the entrance to it of flies. Two old women on each side with penholder-shaped loom-sticks a half meter long continually poked at Aligúyun's face and the wound to wake him up. From time to time they caught the gruesome head by the hair and shook it violently shouting:

Who-oo-oo Aligúyun, wake up! Open your eyes. Look down on Kurúg.<sup>22</sup> Take his father and his mother, his wife and his children, and his first cousins and his second cousins, and his relatives by marriage. They wanted him to kill you. All your kin are women. [They say this in order to deceive Aligúyun into avenging himself.] They can't avengo you. You will have to avengo yourself. There is *ardén*<sup>23</sup> now; no one can kill them but you. Take them all. You are to be pitied. You will be lonesome. Accompany their spirits.<sup>24</sup> If they eat, eat with them. If they sleep, sleep with them. If they go to get water, go with them. If they go to get wood, turn the ax into their bodies. If they go on a journey, push them over a precipice. So, you will have con-

<sup>22</sup> Kurúg being the ranchería from which came Aligúyun's murderer.

<sup>23</sup> Law; referring to the establishment of American authority and the prohibition of head-hunting.

<sup>24</sup> The spirits of the kin of the murderer.

panions there in the Sky World, you will have someone to help you get wood and water.<sup>35</sup>

Thus calling on Aligúyun's soul never ceased. When one old woman grew hoarse, another took her place. As the procession came to the house it filed past Aligúyun and its leaders stopped and shouted words to the same effect as those that the old woman kept shouting. The key-note of the whole ceremony was vengeance. It is true that the man who had killed Aligúyun was himself killed, but the people of a *rancheria* regard themselves as being about the only really valuable people in the world, and hold that three, four, or five men of another *rancheria* are not equal to one of theirs.

#### THE CEREMONIES ON THE HILLS.

Toward noon the people told me<sup>36</sup> that they were going to perform the ceremony which looked toward securing vengeance for Aligúyun's death. They went to a little hillock some distance from any house, where a grass shelter had been built for protection from the piercing rays of the noonday sun. Two pigs were provided there, one of which was very small. Only the old men were permitted to gather around the pigs and the rice wine and the other appurtenances of the ceremony. The ceremony began by a prayer to the ancestors, followed by an invocation to the various deities. The most interesting and principal one of the ceremonies was the invocation of the celestial bodies who are believed to be the deities of War and Justice. Manahaut (the Deceiver) a companion of the Sun God was first invoked. The priests cried:

"Who oo oo, Manahaut! look down! Come down and drink the rice wine and take the pig. Don't deceive us. Deceive our enemies. Take them into the remotest quarters of the Sky World, lock them up there forever so that they will not return. Vengeance for him who has gone before." Then an old priest put his hands over his forehead and called: "Come down, Manahaut of the Sky World." Manahaut came and possessed him causing him to call out "Sa'ai! Sa'ai! I come down Manahaut. I drink the rice wine; I will deceive your enemies, but I will not deceive you!"<sup>37</sup>

<sup>35</sup> It is somewhat strange, this idea of a soul's associating with the souls of his enemies, whose death he has brought about. However, throughout the Ifugao's religion we find evidences that the soul is conceived as losing earthly affections and enmities, but never earthly appetites and desires.

<sup>36</sup> Nagakarian being the *rancheria* that speared and nearly killed my predecessor Mr. Wooden. I explained my presence to the people there by saying that the soldier Lemg an agent of our government was in a way a relative of mine, and that I had come to assist in the last rites and ceremonies due him. The explanation was a perfectly natural one to the people and they treated me with the greatest courtesy and helped me to see whatever was to be seen.

<sup>37</sup> "Deceive" in the sense of "Cause to fall into danger or ambush, possessed by the assurance of safety."

The priest who was possessed jumped up and with characteristic Ifugao dance step, danced about the rice-wine jar, and about the pig. Quickly there followed him a priest who had called Umalgo, the Spirit of the Sun, and who had been possessed by that deity. Manahaut danced ahead of Umalgo to show him the pig, and to urge him on. Umalgo seized a spear, danced about the pig two or three times, then stepped over to it and with a thrust, seemingly without effort, pierced its heart. The priests started the blood-thirsty cry which was taken up by the hundreds of high-wrought barbarians standing round: "So may it be done to our enemies of *Kurūg*."<sup>40</sup> The blood spouted out of the pig's side and there quickly followed a priest who had been possessed by Umbulan, the Spirit of the Moon, who threw himself on the pig and drank its blood. He would have remained there forever, say the people, drinking the pig's blood had it not been for the fact that one of the Stars, Lison, possessed a priest and caused him to dance over to Umbulan, catch him by the hair, and lead him from the pig.

Following these ceremonies other priests came, possessed by various Spirits of the Stars, to cut off the pig's feet and head. And after each event, the cry issued from hundreds of throats: "So may it be done to our enemies." Next came the cutting up of the pig, to cook it in the pots. The blood that had settled in its chest was carefully caught; it was used to smear the *banṭibanṭ*<sup>41</sup> and the *hipag*.

The *hipag* are interesting. (See Plate IX.) They are little images of men, pigs, dogs, chickens, and ducks. The spirits that dwell in them help men to take heads. The *hipag* are made of wood, and are about 15 to 20 centimeters high. When an Ifugao goes on a head-hunting expedition he takes the images in his head-basket together with a stone to make the enemy's feet heavy, so that he can not run away, and a little wooden stick in representation of a spear to the end of which is attached a stone. This last is to make the enemy's spear strike the earth so that it shall not strike him.

As the pig was being put in the pot to be cooked for the priests who had performed the ceremony, some unmannerly young fellows started to make away with one piece of the flesh. Immediately there was a scramble for pork which was joined by some three or four hundred Ifugaos from all the different *rancherías*. Every man there (I think that there were over 1,000 who attended the ceremony) leaped for his spear and shield. The people who had come from *Kaurigan* rushed to where I was and took their stand in front of and around me, and told me to stay there, and that they would protect me from any harm: all of which, as may be supposed, produced no trifling amount of warmth in my feelings toward them. Fortunately nothing came of the scramble.

<sup>40</sup> "*Batna Lana ok thulan di báhol-mx úd Kudug*."

<sup>41</sup> *Banṭibanṭ*, wooden musical instruments, see p. 244

I have no hesitancy in saying that two or three years ago, before Governor Gallman had performed his truly wonderful work among the Ifugaos, this scramble would have become a fight in which somebody would have lost his life. That such a thing could take place without danger was incomprehensible to the old women of Kiangan, who doubtless remembered sons or husbands, brothers or cousins, who had lost their lives in such an affair. With the memory of these old times in their minds they caught me by the arms trying to drag me off with them and said: "Balton [Barton], come home; we don't know the mind of the people. They are likely to kill you." When I persisted in refusing to miss the rest of the ceremony they told me to keep my revolver ready.

Looking back on this incident I am sure that I was in little or no danger, but must give credit to my Ifugao boy who attended me for having the wisest head in the party. This boy immediately thought of my horse which was picketed near, and ran to it, taking with him one or two responsible Kiangan men to help him watch and defend it. Had he not done so some meat-hungry, hot-headed Ifugao might easily have stuck a bolo in its side during the scramble and attendant confusion. Immediately some 500 or more Ifugaos would have been right on top of the carcass and hacking at it with their long knives, and it probably would have been impossible ever to find out who gave the first thrust.

The priests who had performed the ceremony, after the people had quieted somewhat, began scolding and cursing those who had run away with the meat. Finally, they managed to prevail upon the meat snatchers to bring back three small pieces about the size of their hands, from which I concluded that Ifugao is a language admirably adapted to stating a situation clearly,—for I know how hungry for meat these Ifugaos become.

Three old men stuck their spears into a piece of meat and began a series of long stories the theme of which was some past confusion of enemies. At the conclusion of each story they said: "Not there but here; not then but now." The mere telling of these stories is believed to secure a like confusion and destruction of the enemies of the present. When this ceremony had been completed each old man raised his spear quickly in order to secure the impaled meat for himself. If he had not done this it would have been snatched by those who were waiting for that purpose, and made the object of another scramble. In one case one of the old men just missed ripping open the abdomen of the man who stood in front.

#### THE BURIAL.

The ceremonies on the hill being finished, the people made an attempt to assemble by *rancherias* and to file along the trail to bury Aligúyun. Nagakaran *rancheria* took the lead. As the procession came near the grave the men took off their headdresses and strung them on a long pole which was laid across the trail. A Nagakaran man went to where Aligúyun was sitting, picked him up, carried him to the grave, and placed him in a sitting posture facing Knrûg. Aligúyun was not wrapped in a death blanket as corpses usually are. His body was neglected in order to make him angry and incite him to vengeance.

The grave was a sepulcher dug out of a bank. It was walled up with stones after Aligáyun was placed in it and an egg thrown against the tomb whereupon the people yelled: "So let it happen to our enemies of Kurûg."<sup>42</sup> The poles on which were strung the headdresses were taken away and hung over the door of Aligáyun's house. After this the people dispersed to their homes. On the way home they stopped at a stream and washed themselves, praying somewhat as follows:

Wash, water, but do not wash away our lives, our pigs and our chickens, our rice, and our children. Wash away death by violence, death by the spear, death by sickness. Wash away pests, hunger, and crop failure, and our enemies.

*"Batna kana olukulan di báhol mí íd Kudág."*

## ILLUSTRATIONS.

### PLATE I.

- FIG. 1. Kalatonḡ (x), the chief of Kambulo clan, with a group of Kambulo people. (Photograph by Beyer, Banaue, September 12, 1907.)
2. Five of the men who marched in the funeral procession at the burial of Bahatan. Note the headdresses, armlets, and leglets of white bark, also the striped shield and the four *banḡibanḡ*. (Photograph by Beyer, April 3, 1908.)

### PLATE II.

- FIG. 1. Kalatonḡ's head, on the third day after he was beheaded. (Photograph by Beyer, at Banaue in January, 1908.)
2. A man who took part in the procession at the burial of Bahatan. (Dumapis of the village of Bokos, Banaul). Note the painted shield. This man wears a turban in place of the usual bark headdress. (Photograph by Beyer, April 3, 1908.)

### PLATE III.

Southern half of the clan district of Banaul, where Bahatan lived. Battanḡ's house is shown on hill to the left, just above the largest rice terraces. The tomb where Bahatan was buried is in the mountainside behind the same hill. (Photograph by Beyer, February 28, 1911.)

### PLATE IV.

- FIG. 1. The body of Bahatan as prepared for the ceremonies at the house. The head has been fastened in position on the severed neck. Note the *kínillo* on the breast, the shield behind the body, and the wooden spear standing beside each arm. (Photograph by Beyer, April 1, 1908.)
2. A part of the procession at the burial of Bahatan. The people in the foreground, and on the hill to the right of the procession, are spectators. (Photograph by Beyer, April 3, 1908.)

### PLATE V.

Three Ifugao priests of Banaul clan. From left to right they are. Tanḡwara of Aḡḡadal, the overlord of Bahatan mentioned in the text; Pitpu tūḡgai of Ulditaḡḡ, a very wealthy *kadaḡḡyan* but of low rank as a priest; Bulanḡon of Pananḡan, the chief priest of Banaul clan (Photograph by Barton, Banaue, 1911.)



## PLATE VI.

- FIG. 1. A Central Ifugao woman of the serf class. (Ináyao of the village of Pasmakan, Banauol.) Note the coarse garments made of woven bark fiber. (Photograph by Worcester, April, 1903.)
2. Three Central Ifugao women of Kamibulo and Banauol clans. The woman in the center was the wife of Battanig, and the one on the right a relative of Kalatonig. (Photograph by Beyer, Banane, 1906.)
3. A typical Kiánigan Ifugao man Dulúdul of the village of Baai, Kiánigan (Photograph by Beyer, 1906.)

## PLATE VII.

The clan district of Nagakáran, the home of Aligúyun. (Photograph by Martin 1909.)

## PLATE VIII.

- FIG. 1. Kiánigan, Ifugao, looking east from the lieutenant-governor's house at Kiánigan. The black dots in the terraced fields in the foreground are mounds of earth on which cotton is grown. (Photograph by Haskell, 1909.)
2. The central village of the clan district of Búrnai, in Kiánigan Ifugao (Photograph by Beyer, 1907.)

## PLATE IX.

Some Ifugao religious objects used in this ceremony: (a) The basket in which the *hipag* of a Kiánigan Ifugao family are kept; (b) The skull of a crocodile. This skull and one other are practically the common property of Kiánigan clan. It has the same power as the *hipag*. The crocodile is an Ifugao deity; (c) The *hipag*, the *mulinig* (hard, heavy stones), and the stick with a stone tied to one end, that belong to the family of Manáyao, a Kiánigan priest. All of these objects are encrusted with human blood and the blood of sacrificed animals, and are of extreme age. (Photograph by Barton, Kiánigan, 1911.)

## PLATE X.

- FIG. 1. An old priest of Kiánigan. The blanket over his shoulder is of the variety called *kapi*, mentioned in the text. (Photograph by Martin, 1909.)
2. A Central Ifugao priest—Dolmug, of Lugu clan. (Photograph by Martin 1909.)
3. A typical Central Ifugao man Kulúngai of the village of Pasmakan, Banauol. (Photograph by Beyer, Banane, 1905.)



FIG. 1.



FIG. 2.



FIG. 1.



FIG. 2.

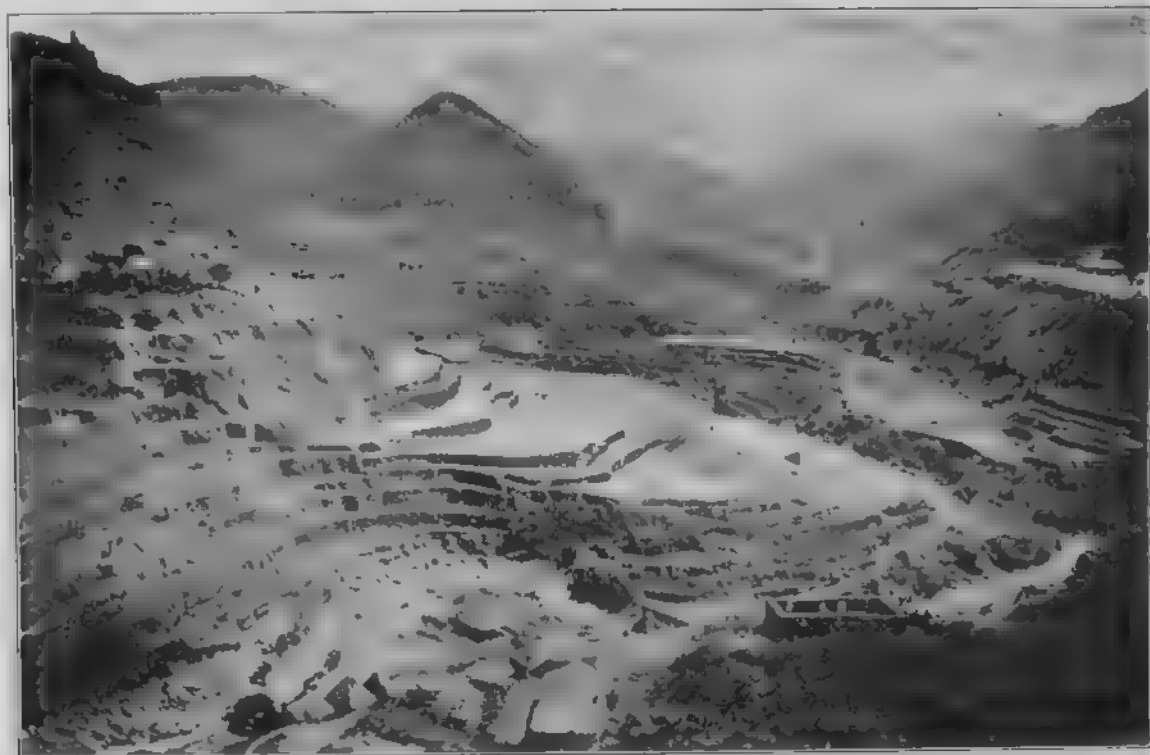


PLATE III.



FIG. 1

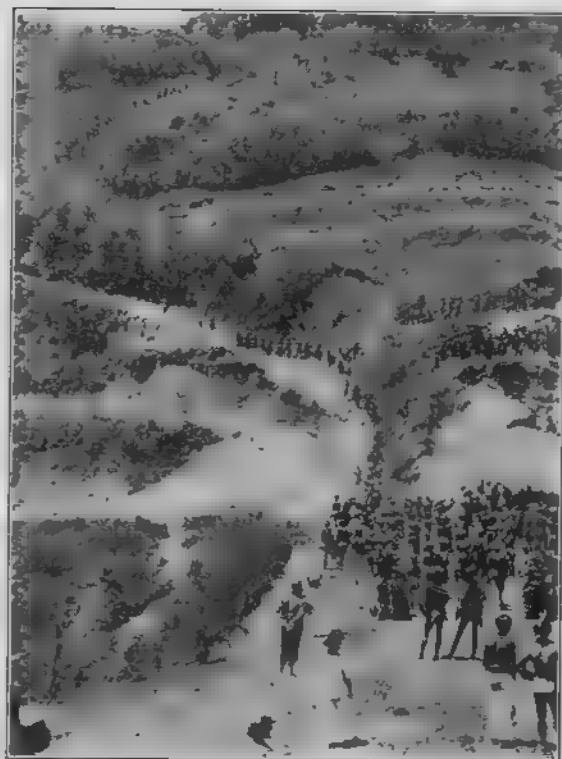


FIG. 2



PLATE V



FIG. 1

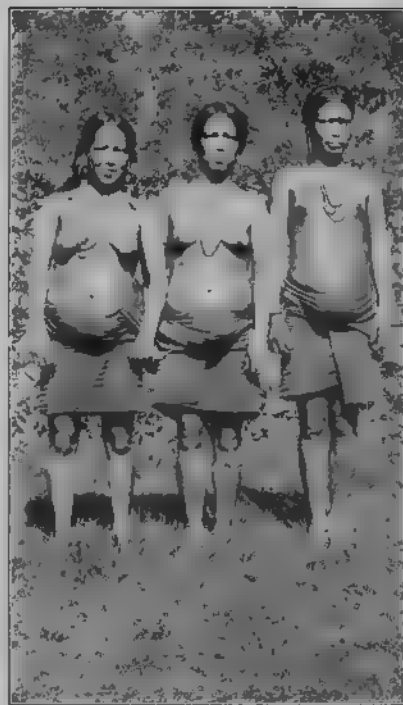


FIG. 2

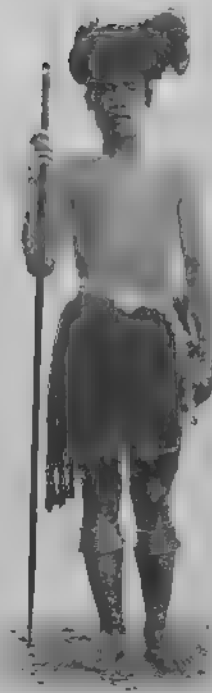


FIG. 3

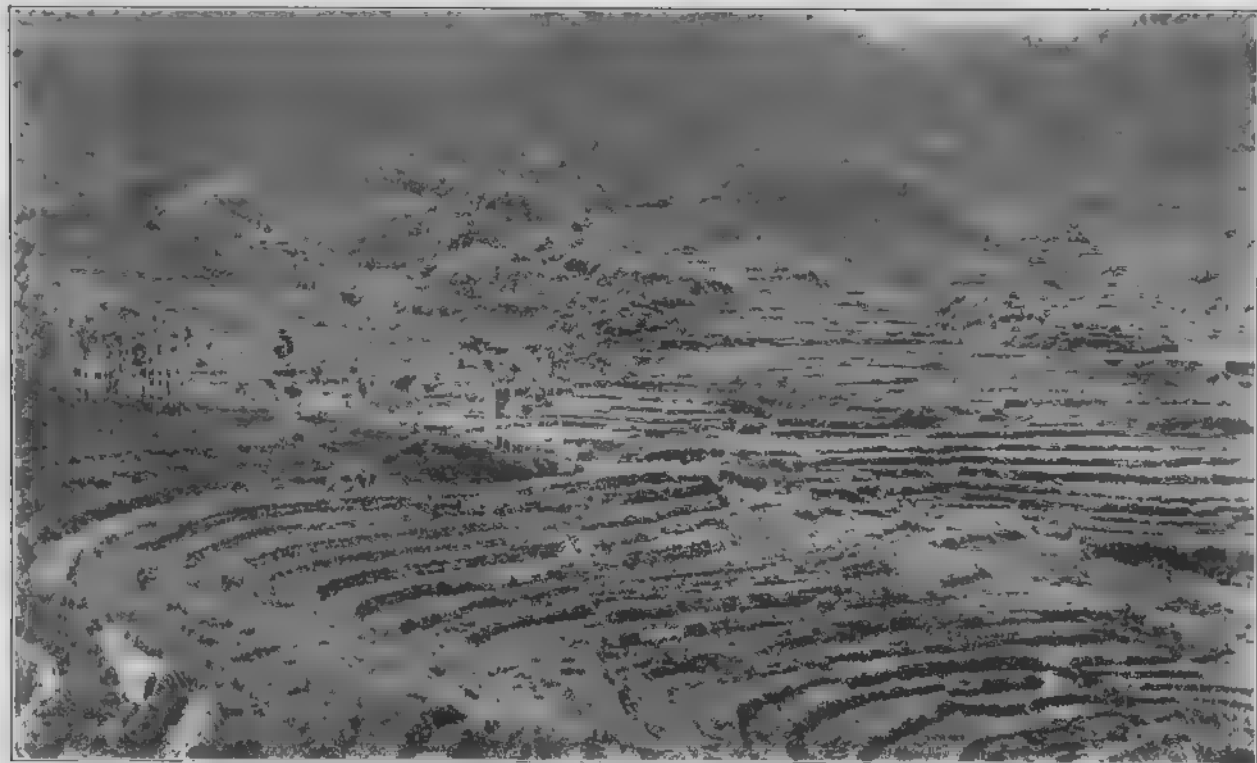


PLATE VII.





FIG. 1.



FIG. 2.



PLATE IX.



FIG. 1



FIG. 2



FIG. 3

## A CHECK-LIST AND KEY OF PHILIPPINE SNAKES.

By LAWRENCE EDMONDS GRIFFIN.<sup>1</sup>

(From the Zoological Laboratory, University of the Philippines, Manila, P. I.)

It is twenty-five years<sup>2</sup> since a list of Philippine snakes has been published. During this time Boulenger's<sup>3</sup> monograph has appeared and the systematic position of many species has been so changed as to limit the use of Boettger's list. A considerable number of species has also been added to the fauna of the Philippines since the appearance of the "Catalogue of Snakes."

The object of the present paper is not only to present a complete list of the ophidian fauna of the Philippines so far as it is now known, but also to present this information in such a form that it can be used by persons who are interested in their local animals. For this reason the list of species is arranged in the form of a key, in which external characters are used to distinguish the species, so far as is possible. The experience of the author indicates that snakes not heretofore recorded from the Philippines, and even new species, may still be met with in any locality. As a large part of the Philippines is still in a zoologically unexplored condition, considerable additions to the herpetological fauna may be expected. Two species not previously recorded from the Philippines are included in this paper; namely, *Xenopeltis unicolor* Reinw. and *Zaocys carinatus* Günther. The occurrence of these species in Palawan again calls attention to the close relationship of the faunæ of that island and Borneo.<sup>4</sup>

In the following list only definite localities usually are given, references to "Philippines" being omitted unless there is no more exact locality known. The classification used in this list is that of Boulenger.

<sup>1</sup>Associate professor of zoology, University of the Philippines.

<sup>2</sup>Boettger, Oskar, Aufzählung der von den Philippinen bekannten Reptilien und Batrachier. *Bericht über die Senck. Naturf. Ges.* (1886), 91-134.

<sup>3</sup>Boulenger, George Albert, Catalogue of Snakes in the British Museum. (1896), 1-3.

<sup>4</sup>Boulenger, G. A., on the Herpetological Fauna of Palawan and Balabac. *Proc. of Mag. Nat. Hist.* (1894), VI, 14, 81-89.

although several recent changes in generic and family names have been followed. As a matter of course, Boulenger has also largely been drawn upon for the structure of the key. The author will be glad to communicate with any residents of the Philippines who are interested in making collections of reptiles and frogs. Snakes are easily preserved in either alcohol (strong) or 10 per cent formalin, if a number of slits are made in the abdomen. If the abdomen is not thoroughly opened the inner tissues decompose before the preserving fluid can penetrate the skin. Lizards require a single abdominal incision.

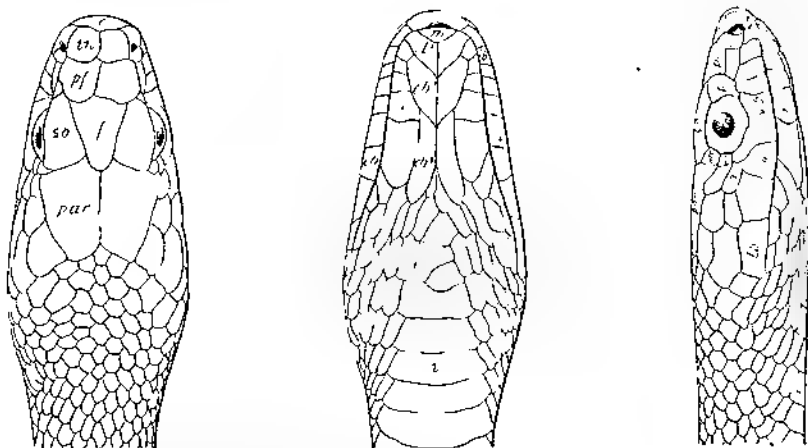


FIG 1.—Head of *Dactylophis carulatus* Griffin. *ch.*, chin shield, *f.*, frontal, *il.*, inferior labial, *m.*, internasal, *lb.*, superior labial, *lo.*, loreal, *mn.*, mental or symphyseal, *n.*, nasal, *par.*, parietal, *pl.*, prelabial, *po.*, preocular, *pto.*, postocular, *r.*, rostral, *so.*, supraocular, *ta.*, anterior or temporal, *tp.*, posterior temporal, *v.*, ventral. (Drawing by T. Espinosa.)

### Family TYPHLOPIDÆ.

Small worm-like snakes living under fallen grass or leaves, or burrowing in the ground. Incapable of harm. Head not distinct from body; eyes reduced to vestiges which are covered by shields; no teeth in the lower jaw or on the palate; no charged ventral scales; tail very short, and pointed, color generally dark brown.

*a.* Snout rounded, nostrils lateral. Genus *Typhlops*.

*b.* Preocular in contact with second and third labials.

*c.* The nasal cleft (i. e. the fissure dividing the nasal shield) proceeding from the preocular. *Typhlops braminus* (Daudin).

Manila (Gray, A. Duméril); Daraga (Peters), Paracale (Peters), southern Mindanao (J. G. Fischer); Negros (Boulenger); Manila, Malabon, Mindoro, Samar (Bureau of Science collection). A most widely distributed snake, occurring in all southern Asia, the Malay Archipelago, the Ladrones, Madagascar, East and South Africa.

*c.* The nasal cleft proceeding from the second labial. *Typhlops jagori* Peters. Mount Isarog, Luzon (Peters). Not known from any other locality.

- b<sup>5</sup>. Preocular in contact with the third labial only.
- c<sup>1</sup>. Thirty scale rows around the body..... *Typhlops ruficanda* (Gray).  
 Daraga and Paracale (*Peters*). Found only in the Philippines.
- c<sup>2</sup>. Twenty-six scale-rows around the body ..... *Typhlops ruber* Boettger.  
 Samar (*Boettger*). Only the type specimen recorded.
- c<sup>3</sup>. Snout with a sharp horizontal edge; nostrils inferior.
- b<sup>1</sup>. Tail from 2 to 2.5 times as long as broad..... *Typhlops olivaceus* (Gray).  
 Samar (*Peters*). Found also in the Moluccas and in northwestern Australia.
- b<sup>2</sup>. Tail 4 to 5 times as long as broad ..... *Typhlops cumingii* (Gray).  
 Philippines (*Gray*). Not recorded elsewhere.

### Family BOIDÆ.

Large snakes; with vestiges of hind limbs usually ending in a claw-like spur, which is visible on each side of the vent. Teeth in both jaws; 65 to 80 longitudinal rows of scales; ventral scales transversely enlarged. Represented in the Philippines by only 1 species. Not poisonous. Light brown, with large rhomboidal markings of dark brown to black. A black line along the middle of the head and on each cheek ..... *Python reticulatus* (Schneider)

Luzon (*Peters*); Laguna, Pohnlo, Palawan (*Bureau of Science collection*).  
 Found throughout Burma, Indo-China, the Malay Peninsula and Archipelago.

### Family ZENOPELTIDÆ.

This family consists of a single species. Teeth are found in the premaxilla, as well as in maxilla, palatines, and mandible. The dentary bone is movably attached to the end of the articular.\* Teeth small and numerous in both jaws (33 to 38). Body cylindrical and thick; tail short, about one-tenth of the total length; scales in 15 rows, smooth and highly iridescent, dark brown with lighter edges on the back and sides, white below; head small, flattened, not distinct from neck, snout rounded; eyes small, pupil vertical; easily distinguished from other Philippine snakes by the presence of an unpaired interparietal scale, between 4 parietals. Not poisonous ..... *Zenopeltis unicolor* Reinhardt.

Ivabig, Palawan (*Bureau of Science collection*). Previously found in the Malay Peninsula, Borneo, Celebes, and Java.

### Family COLUBRIDÆ.

#### Series A. *Aglypha*.

All the teeth solid, without grooves. Non-venomous.

- a<sup>1</sup>. Scales not imbricate, very small and numerous; no enlarged ventral shields;  
 body and tail compressed, with a ventral fold; aquatic.

Subfamily *Acrochordinae*.

Only one species is recorded from the Philippines.

Olive to black, with light transverse bands or rings. Found from southern India to New Guinea. Very common in Manila Bay and the Pasig River ..... *Chersydrus granulatus* (Schneider).  
 Manila (*Peters, Steindachner*); Los Baños, Cabasao, Santik

\*That the arrangement of these bones, is peculiar can be noted without dissection, as the body of the mandibular ramus can be felt nearer the middle line of the lower jaw than the dentary, and in a position markedly different from its position in other snakes.

Luzon (*Peters*), Manila Bay (*Boulenger*); Bantayan and Samar (*Bureau of Science collection*)

a<sup>2</sup>. Scales uniliculate, large ventral shields, head covered by regular scales. Subfamily Colubrinae.

1. Hypapophyses<sup>a</sup> present on the vertebrae of the posterior fifth of the trunk.

a<sup>1</sup>. Dentary bone of mandible loosely attached to the apex of the articular, and freely movable upon it; teeth very numerous and closely set, equal, 30 to 50 in each jaw; no interparietal shield. Length, 490 millimeters. Black above, with a white streak on each side. White below, with a black spot on the outer end of each shield.

*Polyodontophis bivittatus* Boulenger.

Palawan (*Boulenger*). Only the type specimen known.

a<sup>1</sup>. Dentary bone not, or but slightly, movable on the articular.

b. Posterior maxillary teeth longest (18 to 40 in all),<sup>7</sup> mandibular teeth sub-equal; eye moderate or large with round pupil; a pair of internasal shields. Scales generally keeled.

Genus *Natrix*.

c<sup>1</sup>. Maxillary teeth not more than 30, the last 2 or 3 abruptly enlarged.

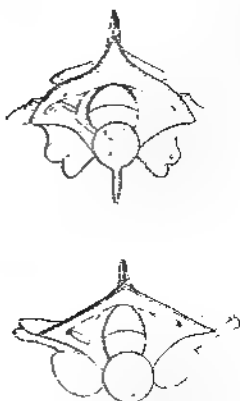


FIG. 2.—Upper figure vertebra with a hypapophysis projecting from the lower side of the centrum. Lower figure; vertebra without hypapophyses (From Boulenger)

<sup>a</sup>To note the presence or absence of the hypapophyses it is necessary to make a slit in the posterior fifth of the abdomen; by pushing the viscera aside and bending the backbone downward the ventral surfaces of the vertebrae may be examined. If hypapophyses are present they appear as median ventral processes of the vertebrae.

<sup>7</sup>As the characters of the maxillary teeth are most important in classifying snakes, it is necessary that they should be determined without mistake. The method described by Stejneger, *Herpetology of Japan and Adjacent Territory*, page 258, is most useful. "The examination of the dentition must be made very carefully in order to avoid mistakes. The safest way is probably to dissect out one of the maxillary bones. This can be done very easily by running the point of a sharp knife between the supralabials and the underlying bone, cutting the tissue along the whole length of the latter. By forcing the point of the knife over the upper edge of the bone in the region of the eye the bone can be easily lifted up and the connecting ligaments severed. The adherent tissue may be carefully removed, though in most cases it is sufficient to let it dry. The teeth can now be examined conveniently. Care must be had not to mistake the space left by a lost tooth for a natural interval; if a tooth has fallen out, a distinct pit or depression is left on the alveolar edge of the maxilla. In counting the teeth the second inner row of loose teeth which are only the reserve teeth must not be taken into consideration. If the specimen is so hardened that it is difficult to open the mouth it should not be forced open by prying, a procedure apt to ruin the teeth and break the lower jaw, but the thick muscle at the corner of the mouth closing the jaws should be cut through on both sides. If properly done the specimen need show no outward sign of mutilation. The maxilla after being dissected out and cleaned should be placed in a small glass tube or vial and provided with the same number as the snake, kept in the same bottle, or separately together with other preparations of the same kind."

d<sup>1</sup>. Head moderately elongate, not distinct from neck.

e<sup>1</sup>. A single anterior temporal. "Greenish or brownish olive, with more or less distinct black spots or reticulated cross-bars intersected by two yellow longitudinal bands, which are best marked posteriorly." (Boulenger) ..... *Natrix stolata* (Linnaeus).  
Calumpit, Bulacan Province (Peters). Widely distributed from Ceylon to the Himalayas and the Malay Archipelago.

e<sup>2</sup>. Two anterior temporals.

f. Internasals shorter than prefrontals; outer row of scales feebly keeled. Yellowish brown, with darker stripes and spots. Belly white or yellowish, with numerous round, black dots.

*Natrix spilogaster* Boie.

Negros (Boulenger); Palawan (Boulenger); Manila (Jan); Albay (Peters); Batuan (F. Müller); southern Mindanao (J. G. Fischer); Manila and vicinity, Polillo, Limay, Camiguin<sup>3</sup> (Bureau of Science collection). Occurs in the Philippines only.

f<sup>1</sup>. Internasals as long as prefrontals; all scales strongly keeled. Brown or greenish above, with indistinct darker cross-bars; frequently with a series of light vertebral spots; yellowish white below, with few or no dark dots. .... *Natrix chrysarga* Boie.

Palawan (Bureau of Science collection). Common in Palawan, which is the only island of the Philippines in which this widely distributed snake is found. Elsewhere, found in the eastern Himalayas, Assam, Burma, southern China, the Malay Peninsula, Sumatra, Borneo, and Java.

d<sup>2</sup>. Head short, very distinct from neck.

e<sup>1</sup>. Scales in 17 rows. Dark brown above, with a yellowish vertebral stripe, and a white stripe on each side. *Natrix auriculata* Günther  
Loquilocun, Samar (Peters); Mindanao (F. Müller); southern Mindanao (J. G. Fischer); Pasananca (Challenger). Confined to the Philippines.

e<sup>2</sup>. Scales in 19 rows.

f. Subcaudals 96 to 101. Olive above, vertebral line lighter.

*Natrix crebripunctata* (Wiegmann).

Philippines (Günther). Restricted to the Philippines.

f<sup>1</sup>. Subcaudals 66 ..... *Natrix lineata* (Peters).  
Loquilocun, Samar (Peters). Known only from the Philippines.

e<sup>3</sup>. Maxillary teeth 35 to 40, the posterior ones but slightly enlarged; eye very large, body very slender. Olive above, with black spots and two series of yellowish spots; yellowish beneath, with numerous large black dots ..... *Natrix dendrophiceps* (Günther).  
Zamboanga (Challenger); Mindanao (F. Müller); Agusan River Valley, Mindanao (Bureau of Science collection). Known only from the Philippines.

b<sup>2</sup>. Maxillary teeth subequal, 20 to 35; pupil vertically elongated; snout pointed. The genus is Philippine exclusively. .... Genus *Oxyrhabdium*.

<sup>3</sup> Camiguin, throughout this paper, refers to the island of that name in the Babuyan, north of Luzon.



- c<sup>1</sup>. Eight upper labials, fifth and sixth entering the eye. Reddish brown above, yellowish below.

*Oxyrhabdium modestum* (Duméril et Bibrón).

Luzon (Günther); Samar (Peters); Dinagat (Boulenger); Mindanao (F. Müller); Samar and Mindanao (Bureau of Science collection).

- c<sup>2</sup>. Seven upper labials, fourth and fifth entering the eye. Colors like those of the preceding species. .... *Oxyrhabdium leporinum* (Günther).  
Luzon (Boulenger).

- b<sup>2</sup>. Posterior maxillary and mandibular teeth smallest; enlarged anterior maxillary teeth separated from the other teeth by a short space; scales equal, smooth, with apical pits; nostril between 2 nasals, pupil round. Dark brown above. Belly white with triangular brown spots along each side. A genus of 1 species, which is found only in the Philippine.

*Cyclocorus lineatus* (Reinhardt).

Manila (Jan); Daraga (Peters); Mindanao (F. Müller); Occidental Negros; Benguet, Laguna, Bataan, and Tarlac Provinces, Luzon; Polillo (Bureau of Science collection).

## II. Hypapophyses absent in the posterior dorsal vertebrae, the lower surfaces of which are smooth.

- a<sup>1</sup>. Anterior maxillary and mandibular teeth strongly enlarged; posterior maxillary teeth increasing in size; anterior maxillary teeth separated from the rest by an interspace .... Genus *Ophites*.

- b<sup>1</sup>. A præocular, separating the eye from the præfrontal.

- c<sup>1</sup>. Nasal single. Three series of alternating black spots on the back; brown below .... *Ophites tessellatus* (Jan).

Manila (Jan). Recorded from the Philippines only, with Manik as the only definite locality.

- c<sup>2</sup>. Nostril between 2 nasals. Dark brown above, with light yellow lips and collar. Yellowish below. A common snake about Manila.

*Ophites aulicus* (Linnaeus)

Manila (Peters, Westphal-Castenau); Paracale (Peters); Butuan Mindanao (Günther); southern Mindanao (J. G. Fischer); Manila Cuyo, Bantayan, Occidental Negros, Montalban (Bureau of Science collection). Widely distributed in southern India and the East Indian Islands.

- b<sup>2</sup>. No præocular; præfrontal entering the eye. Dark brown on the back and sides, crossed with broad bars of white. .... *Ophites subcinctus* (Boie).

Mindanao (Boulenger); Iwahig, Palawan (Bureau of Science collection). Found also in the Malay Peninsula, Borneo, Sumatra, and Java.

- a<sup>2</sup>. Anterior maxillary teeth increasing in size to the eighth or ninth, which is fang-like, followed by a short interspace, then 3 small teeth succeeded, without a second interspace, by 3 much enlarged, laterally compressed teeth .... Genus *Haplonodon*.

The genus is represented by a single species. General color brown. The body and tail crossed by numerous (79) dark bands separated by narrow light bands .... *Haplonodon philippinensis* Griffin.

Polillo (Bureau of Science collection).

- a<sup>3</sup>. Anterior maxillary teeth not enlarged, middle and posterior longest, no interspaces; pupil vertically elliptic .... Genus *Stegonotus*.

- b*. Not more than 100 subcaudals. Uniform brown above, whitish below.  
*Stegonotus muelleri* Duméril et Bibron.  
 Samar (Duméril and Bibron); Cubo-cubo, Samar (Peters). Not recorded from any other place.
- b*. One hundred and twelve to 123 subcaudals. Grayish brown above with a median row of dark brown spots, and a row of smaller spots on each side; yellowish beneath ..... *Stegonotus dumerillii* Boulenger.  
 Surigao (Günther); Daraga, Iraga Volcano (Peters). Limited to the Philippines.
- a*. Anterior and middle maxillary teeth not enlarged; posterior increasing in size, or the last strongly enlarged.
- b*. Palatine and pterygoid bones toothed; pupil vertically elliptic. Maxillary teeth 8 to 10 ..... *Dryocalamus philippinus* Griffin.  
 Iwahig, Palawan (Bureau of Science collection). A single specimen only is known. Length, 241 millimeters. Black above, with 3 narrow, white longitudinal stripes; lower surface white.
- b*. Palatine and pterygoid bones toothed; pupil round.
- a*. Longitudinal series of scales in even numbers; maxillary teeth 20 to 23.  
 Genus *Zaocys*.
- d*. Scales in 14 rows ..... *Zaocys luzonensis* Günther.  
 Luzon (Günther). Only the type specimen appears to be recorded.
- d*. Scales in 16 or 18 rows; 2 median dorsal rows of scales keeled. Dark brown. This snake can be recognized instantly by the dorsal keels.  
*Zaocys carinatus* Günther.  
 Iwahig, Palawan (Bureau of Science collection). Three specimens were recently captured in Palawan, where the snake is said to be common. This species has been found in Borneo, Sumatra, and the Malay Peninsula, but has not been recorded before from the Philippines. A large snake, reaching a length of 3 meters.
- c*. Longitudinal series of scales in odd numbers; ventrals rounded laterally. Maxillary teeth 8 to 12, posteriorly compressed. .... Genus *Holarchus*
- d*. Two superposed anterior temporals. Dark brown, with an indistinct, lighter, vertebral stripe ..... *Holarchus octolineatus* (Schneider).  
 Tawi Tawi (Boulenger). Found in Java, Borneo, Sumatra, Malay Peninsula, and southern India.
- d*. A single anterior temporal. Above, light brown with transverse black-edged blotches. Rosy pink below, when alive.  
*Holarchus phænochalinus* (Cope).  
 Luzon (Boulenger); Manila (Cope); southern Mindanao (J. G. Fischer); Daraga, Luzon (Peters); Manila, Benguet, Zambales (Bureau of Science collection). Known also from Java.
- c*. Longitudinal series of scales in odd numbers; ventrals with suture-like lateral keels, and a notch on each side corresponding to the keel. Scales of dorsal row large ..... Genus *Dendrophis*.
- d*. Scales in 15 rows. Olive, bronzy brown, or dark blue above. Usually striped along the sides. Lower parts greenish.  
*Dendrophis pictus* (Gmelin).  
 Manila (Duméril and Bibron); Daraga, Albay; Mount Santik, Passino; Camarines (Peters); Loquilocun, Samar (Peters); Mindanao (Duméril and Bibron), southern Mindanao (J. G. Fischer).

Palawan, Manila, Mindoro, Tarlac, Polillo (*Bureau of Science collection*). Widely distributed over southern Asia, the Malay Peninsula and Archipelago.

d<sup>2</sup>. Scales in 13 rows. Brown or olive above, lighter below.

*Dendrophis punctulata* (Gray)

Ticao (*Parenti and Picaglia*). Found elsewhere in northern and eastern Australia, New Guinea, and the Moluccas.

b<sup>2</sup>. Palatine and pterygoid teeth absent or few; maxillary bone short, with 6 to 8 teeth in an uninterrupted series..... Genus *Oligodon*.

c<sup>1</sup>. Anal entire.

d<sup>1</sup>. One postocular; no loreal. Dark brown above with a yellowish vertebral streak; yellowish below *Oligodon modestus* Günther.

Southern Negros (*Günther*). Found only in the Philippines.

d<sup>2</sup>. One postocular; loreal present. "Dark purplish brown above, with yellow dots and a series of large transverse, rhomboidal, yellow, black-edged spots; head yellow, with two chevron shaped black bands". (*Boulenger*). . . . . *Oligodon notospilus* (Günther)

Mindoro (*Günther*). The type specimen only known.

d<sup>3</sup>. Two postoculars; loreal present. Dark purplish brown above, with 11, dark red, rhomboidal spots along the back. Ventral surface rose red . . . . . *Oligodon iwahigensis* Griffin

Iwahig, Palawan (*Bureau of Science collection*).

c<sup>2</sup>. Anal divided. Dark gray above, with very small, white, black-edged spots; 2 chevron-shaped transverse bands on the head; ventral surface orange . . . . . *Oligodon schadenbergii* Boettger

Busuanga (*Boettger*). Known only from this locality

a<sup>2</sup>. Maxillary teeth equal or nearly so, or the posterior ones decreasing in size.

b<sup>1</sup>. Scales with apical pits.

e<sup>1</sup>. Scales forming straight longitudinal series... Genus *Elaphe*.

d<sup>1</sup>. Anal divided. Bright bluish green. A large snake reaching a length of 2.3 meters . . . . . *Elaphe oxycephala* (Boie)

Legaspi, Luzon (*Peters*); Iwahig, Palawan (*Bureau of Science collection*). Common to the eastern Himalayas, the Malay Peninsula and Archipelago.

d<sup>2</sup>. Anal entire.

c<sup>1</sup>. Without bars along sides. Nearly uniform reddish brown.

*Elaphe erythrura* (Duméril et Bibron).

Luzon, northern Leyte, Negros (*Günther, Boulenger*); Daraga, Luzon (*Peters*); Manila (*Jan*); Loquilocun, Samar (*Peters*); Mindanao (*J. G. Fischer*); Manila, Malabon, Tarlac; Occident 1 Negros, Polillo (*Bureau of Science collection*). Found also in Celebes.

c<sup>2</sup>. With 3 to 14 black spots or bars on the anterior part of the body Except for the spots the coloring is the same as of *E. erythrura*

*Elaphe philippina* Griffin

Iwahig, Palawan (*Bureau of Science collection*). Not known from any other locality.

c<sup>3</sup>. Scales narrow and obliquely arranged; ventrals and subcaudals with suture-like lateral keels and a notch on each side corresponding to the keel; vertebral row of scales not enlarged Genus *Dendrelaphis*.

- a* Four to 8 black stripes extending the length of the body. Bronzy or greenish yellow, the dark edges of the scales forming the black stripes which extend the length of the body.

***Dendrelaphis caudolineatus* Gray**

Puerto Princesa, Palawan (*Boulenger*); Iwahig, Palawan (*Bureau of Science collection*). Found in southern India, Borneo, and Sumatra.

- a*<sup>2</sup> A single black stripe on each side extending the length of the body. 2 to 4 others on the posterior third of the body.

***Dendrelaphis terrificus* (Peters).**

Albay (*Peters*); Ticao (*Parenti and Pleagha*); Loquilocan and Borongan, Samar (*Peters*); northern Mindanao (*Günther*); Camiguin (*Bureau of Science collection*). The few specimens secured indicate that this snake occurs over the entire Philippine Archipelago. It is also found in Celebes.

- a*<sup>3</sup> Olive above, scales finely edged with black; no black lines on the body.

***Dendrelaphis modestus* Boulenger.**

Bongabon, Mindoro (*Bureau of Science collection*). Hitherto known only from Ternate, Malacca, and Batjan (*Boulenger*).

- a*<sup>4</sup> Upper surface dull, dark brown; skin under scales deep blue; ventrals bluish . . . . . ***Dendrelaphis caeruleatus* Griffin.**

Siquijor, Banton, Negros Occidental, Polillo (*Bureau of Science collection*). Known from these localities only.

- a*<sup>5</sup> Seal brown above, slightly lighter below, under surface of head reddish brown . . . . . ***Dendrelaphis fuliginosus* Griffin.**

Negros (*Bureau of Science collection*). Only the type specimen known.

- b*<sup>2</sup> Scales without pits.

- a*<sup>1</sup> Anterior temporal present . . . . . Genus ***Ablabes*.**

- a*<sup>1</sup> Nostril in a single nasal which is completely divided from the internasal. Olive or greenish above, white below. A short black stripe on each side of the head and neck.

***Ablabes tricolor* (Schlegel).**

Iwahig, Palawan (*Bureau of Science collection*). Also occurs in Java, Sumatra, and Borneo.

- a*<sup>2</sup> Nostril between nasal and internasal, which are completely fused in front of the nostril. Light yellowish-brown above, with 4 dark brown, longitudinal streaks, the middle ones broader than the lateral; whitish-yellow below . . . . . ***Ablabes philippinus* Boettger.**

Culion and Samar (*Boettger*); Iwahig, Palawan (*Bureau of Science collection*). Found only in the Philippines.

- a*<sup>3</sup> Anterior temporals absent, the parietals being in contact with the labials; nostril in a single minute nasal; no loreal. Very small snakes.

- a*<sup>4</sup> Internasals present . . . . . Genus ***Pseudorhabdium*.**

- a*<sup>1</sup> Supraocular distinct; a preocular; frontal longer than broad. Iridescent brown, often with a yellowish collar.

***Pseudorhabdium longiceps* (Cantor).**

Daraga, Luzon (*Peters*). Found also in the Malay Peninsula, Sumatra, Borneo, and Celebes.

- c*<sup>2</sup> Supraocular very small and united with the postocular; no præocular; frontal broader than long. Uniform iridescent dark brown . . . . . *Pseudorhabdium oxycephalum* (Gunther).  
Negros (*Boulenger*). Found only in the Philippines.
- d*<sup>1</sup> No internasals . . . . . Genus *Calamaria*.
- e*<sup>1</sup> Symphysial in contact with the anterior chin shields.  
*f*<sup>1</sup> Frontal less than twice as broad as the supraocular. Black above barred with alternate bands of black and white below  
Calamaria grayi Gunther.  
Recorded by Gunther as from the "Philippines," the definite locality being unknown. Not known elsewhere.
- f*<sup>1</sup> Frontal at least twice as broad as the supraocular. Rostral as deep as broad, frontal as long as the parietals. Brown above, uniform yellowish below . . . . . *Calamaria bitorques* Peters  
Luzon (*Boulenger*). Restricted to the Philippines.
- f*<sup>2</sup> Rostral as deep as broad, frontal shorter than the parietals. Brown above, with several fine light streaks on each side, yellow below (in spirit, white)  
Calamaria gervaisii Duméril et Bibron.  
Manila (*Jan*), Batn, Daraga, Paracale, Mount Iriga (*Peters*); Bataan (*F. Muller*); southern Negros (Gunther); southern Mindanao (*J. G. Fischer*), Manila (*Bureau of Science collection*) A purely Philippine form.
- f*<sup>4</sup> Rostral broader than deep, frontal shorter than the parietals. Brown above with longitudinal series of black dots, a yellow spot on each side of the neck.  
Calamaria mindorensis Boulenger.  
Mindoro (*Boulenger*) Only the type specimen is recorded.
- e*<sup>2</sup> Symphysial not in contact with anterior chin shields.  
*f*<sup>1</sup> Diameter of eye much more than its distance from the mouth. Brown above, with two longitudinal rows of dark spots on each side . . . . . *Calamaria everetti* Boulenger.  
Palawan (*Boulenger*); Iwahig, Palawan (*Bureau of Science collection*) Also found in Borneo
- f*<sup>1</sup> Diameter of eye less than half its distance from the mouth; 250 ventrals. Dark brown above, with the two outer scale rows tipped with yellowish; a yellow collar on the neck; a pair of large pale lateral spots at the base of the tail.  
Calamaria mearnsi Stejneger.  
Mindanao (*Stejneger*) Only the type specimen recorded.
- d*<sup>2</sup> Internasals present, eye concealed under the ocular shield. Uniform blackish, scales edged with white. A Philippine genus with a single species . . . . . *Typhlogeophis brevis* Gunther.  
Northern Mindanao or Dinagat (*Gunther*). Only the type specimen known

### Series B. *Opisthoglypha*.

One or more of the posterior maxillary teeth grooved and usually enlarged, forming small fangs. The snakes of this series are poisonous, but on account of the position of the fangs in the back of the jaw and their small size, they are not often dangerous to man. Their prey consists principally of lizards and small mammals which they paralyze before swallowing.

- a<sup>1</sup>. Nostrils valvular, on the upper surface of the snout; aquatic snakes.

Subfamily Homalopsinae

- b<sup>1</sup>. Nasals in contact. Scales keeled; numerous small scales in place of the parietals ..... Genus *Hurria*.

- c<sup>1</sup>. Four lower labials in contact with the anterior chin shields; scales strongly keeled, in 23 to 27 rows, ventrals 132 to 160. Light brown above and below, spotted and barred with dark brown.

*Hurria rhynchops* (Schneider).

Manila (*Jan*); Batu, Daraga, and Buhí, Luzon (*Peters*); Negros (*Günther*); Placer, Mindanao (*Günther*); Palawan (*Boulenger*); Bantayan, Polillo, Palawan, Cuyo (*Bureau of Science collection*). Found along the coasts of India, Ceylon, the Malay Peninsula and Archipelago, the Pelew Islands, Timor, and the Moluccas.

- c<sup>2</sup>. Three lower labials in contact with the anterior chin-shields; scales fully keeled, in 29 rows; ventrals 163 to 165. Color about the same as in *Hurria rhynchops* (Schneider) ..... *Hurria microlepis* (Boulenger).

Philippines (*Boulenger*); Camiguin (*Bureau of Science collection*).

Not recorded from any other locality.

- b<sup>2</sup>. Nasals separated by a single internasal. Dark olive or gray above, with a broad white band on each side.

*Gerardia prevostiana* (Eydoux et Gervaise)

Manila (*Duméril and Bibron*). Found along the coasts of India, Ceylon, and Burma.

- a<sup>2</sup>. Nostrils not valvular, lateral; mostly tree or bush snakes.

Subfamily Boiginae

- b<sup>1</sup>. Anterior mandibular teeth strongly enlarged; scales without pits; subcaudals single; pupil round; scales smooth; solid maxillary teeth equal, 20. Hypapophyses developed to some extent throughout the vertebral column. Brown above, with black spots on the head and neck, and a black line on each side of the posterior part of the body and the tail; lower parts yellowish ..... *Hologerrum philippinum* Günther.

Philippines (*Boulenger*). A genus containing only a single species, and limited to the Philippines.

- b<sup>2</sup>. Solid maxillary teeth subequal; head very distinct from neck, pupil vertical.

Genus *Boiga*.

- c<sup>1</sup>. Anterior palatine teeth but slightly enlarged.

- d<sup>1</sup>. Snout longer than the diameter of the eye; scales in 21 rows. Ringed by alternating, broad black and narrow yellow, bars.

*Boiga dendrophila* (Boie).

Samar (*Peters*); Mindanao (*Günther*); southern Mindanao (*J. G. Fischer*); Palawan and Mindanao (*Boulenger*); Palawan, Rizal Province, Polillo (*Bureau of Science collection*). Found throughout the Malay Peninsula and Archipelago.

- d<sup>2</sup>. Snout as long as the eye; scales in 19 rows. Grayish or yellowish brown, with dark brown spots and cross bars, the latter extending across the belly ..... *Boiga angulata* (Peters).

Leyte (*Peters*); Polillo (*Bureau of Science collection*). A strictly Philippine species.

- c<sup>2</sup>. Anterior palatine teeth strongly enlarged.

- d<sup>1</sup>. Scales in 19 rows. Brownish yellow above with black cross-bars.

*Boiga philippina* (Peters)

Luzon (*Peters*). Not found elsewhere.

- d. Scales in 23 to 25 rows. Fawn colored, reaching a length of 2 meters.  
*Boiga cyonodon* (Boie).  
 Mindanao (*Günther*); Palawan and Polillo (*Bureau of Science collection*). Found also in Assam, Burma, the Malay Peninsula and Archipelago.
- b<sup>2</sup>. Solid maxillary teeth subequal; scales with apical pits. Pupil round or horizontal.
- c<sup>1</sup>. Pupil horizontal. Pale brown, mottled with darker color.  
*Dryophiops philippina* Boulenger  
 Cape Engaño, Luzon (*Boulenger*); Manila (*Bureau of Science collection*). Known only from Luzon.
- c<sup>2</sup>. Pupil round. Usually black above, with white markings on the head, and a series of red flower-shaped spots on the back. Sometimes the snake is uniform light brown or brownish gray, without markings.  
*Chrysopelea ornata* (Slaw)  
 Manila (*Steindachner*); Lauang, Samar (*Peters*); southern Mindanao (*J. G. Fischer*); Manila, Banton, Bantayan, Palawan, Mindoro, Polillo (*Bureau of Science collection*). Widely distributed throughout the Malay Peninsula and Archipelago.
- b<sup>1</sup>. Solid maxillary teeth unequal, the middle ones longest.
- c<sup>1</sup>. Pupil vertically subelliptic. Iridescent dark brown; lower parts powdered with brown dots ..... *Psammodynastes pulverulentus* (Boie).  
 Balabac, Palawan, Mindanao, Dinagat, Albay (*Boulenger*); Palawan, Mindanao, Negros, Polillo, Sorsogon (*Bureau of Science collection*). Widely distributed in southern Asia, Formosa, the Malay Peninsula and Archipelago.
- c<sup>2</sup>. Pupil horizontal. Typically, leaf green above, with a narrow yellow lateral line; yellowish green below. The color varies greatly, gray, pink, dark red, dark blue, and yellow specimens being found. Commonly known as the rice snake or *dakon-palay*..... *Dryophis prasinus* Boie  
 Sibutu, Mindanao, Luzon (*Boulenger*); Daraga and Albay (*Peters*); Samar (*Peters*); southern Mindanao (*J. G. Fischer*); Polillo, Negros, Bataan Province, Camiguin, Palawan (*Bureau of Science collection*). Distributed throughout southern Asia, the Malay Peninsula and Archipelago.

### Series C. *Proteroglypha*.

The anterior maxillary teeth grooved or folded into a tube, and usually considerably enlarged. Venomous snakes.

- a<sup>1</sup>. Tail strongly compressed into a vertical fin ..... Subfamily Hydrinæ.
- b<sup>1</sup>. Ventral shields small or absent.
- c<sup>1</sup>. All maxillary teeth grooved (some are often very faintly grooved): 4 to 10 small teeth follow the fangs ..... Genus *Disteira*
- d<sup>1</sup>. Head very small; diameter of neck not half the greatest depth of the body ..... *Disteira fasciata* (Schneider).  
 Manila (*Peters*). Found from India to New Guinea.
- d<sup>2</sup>. Distinguished from *D. fasciata* (Schneider) by characters which can not be readily included in this key, is  
*Disteira cincinnatii* Van Denburgh and Thompson  
 Manila Bay (*Boettger, Van Denburgh and Thompson*). Not recorded from any other locality.

- d. Head not remarkably small; diameter of neck more than half the greatest depth of the body.
- e. Second pair of chin-shields separated by several scales.
- f. Two or 3 superposed anterior temporals ... *Disteira ornata* (Gray).  
Iwahig, Palawan (*Bureau of Science collection*). Coasts of southern Asia to northern Australia.
- f. A single anterior temporal ... *Disteira semperi* (Garman).  
Lake Taal, Luzon (*Garman*). Not known elsewhere.
- e. Second pair of chin-shields in contact or separated by 1 scale.
- f. One postocular, one anterior temporal; head black above, with a crescentic yellow mark ..... *Disteira spiralis* (Shaw).  
Manila (*Jan*). Found on the coasts of India and the Malay Archipelago.
- f. Two postoculars, two superposed anterior temporals.
- g. Thirty-nine to 45 scales around the middle of the body.  
*Disteira cyanocincta* (Daudin).  
Manila (*Jan*); Cebu (*Boulenger*). Found on the coasts of the Persian Gulf, India, China, Japan, Formosa, and the Malay Archipelago.
- g. Second upper labial in contact with the prefrontal; 34 scales around the body; grayish with darker cross-bars.  
*Disteira longiceps* (Güntler).  
Manila Bay (*Bureau of Science collection*). Recorded from the Indian Ocean.
- e. Maxilla short; 2 to 5 small, faintly grooved teeth follow the large fangs. Body short and stout; scales polygonal, juxtaposed. Alternating transverse bands of black and yellow. .... *Lapemis hardwickii* Gray  
Manila (*Jan*, *Steindachner*); Manila and Negros (*Boulenger*); southern Mindanao (*J. G. Fischer*); Manila (*Bureau of Science collection*). Found from the coasts of India to New Guinea.
- b. Ventral shields large.
- c. Nostrils on upper surface of snout; nasals in contact with each other; 8 to 10 grooved teeth in addition of the fangs.  
*Aipysurus eydouxii* (Gray).  
Philippines (*Boulenger*). Recorded also from Singapore and Java.
- c. Nostrils lateral; nasals separated by internasals; one or two small solid teeth in addition to the fangs. .... Genus *Laticauda*.
- d. No unpaired shield between the prefrontals.  
*Laticauda laticaudata* (Linnaeus).  
Samar (*Peters*). Widely distributed along the northern and eastern coasts of the Indian Ocean.
- d. An unpaired shield between the prefrontals. The largest of our marine snakes, reaching a length of more than 2 meters. Olive or yellowish with broad, brilliant, black rings. *Laticauda colubrina* (Schneider).  
Luzon (*Peters*); Jolo (*Günther*); Palawan, Bantayan (*Bureau of Science collection*).
- a. Tail cylindrical. Poison fangs well developed ... Subfamily *Elapinae*.
- b. Internasal bordering the nostril; scales oblique ... Genus *Naja*.
- c. Seventeen to 25 scales around the middle of the body, 21 to 35 scales around the neck; rostral 1.25 to 1.5 times as broad as deep.  
*Naja naja* (Linnaeus).



- $\delta^1$ . Pale brown or yellowish without markings on body or head; 25 to 31 scales across the neck, 21 to 25 across the body.

*Naja naja* var. *cacca* Gmelin

Northern Luzon (*Boulenger*); Manila, Palawan (*Bureau of Science collection*). Distributed from Transcausia to Java

- $\delta^2$  Dark brown or black, 21 to 23 scales across the neck, 17 to 19 across the body. . . . . *Naja naja* var. *mirolepis* Boulenger.

Palawan (*Boulenger*); Palawan (*Bureau of Science collection*)

Recorded only from Borneo and Palawan.

- $c^2$  Seventeen to 19 scales around the body; 21 or 23 around the neck; rostral one and two thirds times as broad as deep. Darker brown than *Naja naja* var. *cacca* . . . . . *Naja samarensis* (Peters)

Samar (*Peters*); Mindanao and Leyte (*Boulenger*); Samar (*Bureau of Science collection*). Known only from Samar, Leyte, and Mindanao

- $c^3$  Fifteen scales across the middle of the body, 19 or 21 across the neck, a pair of large occipital shields back of the parietals. The largest of venomous snakes, it is said to prey exclusively upon other snakes. This species is often called the king cobra or hamadryad. Nearly uniform light brown. . . . . *Naja bungarus* Schlegel

Samar (*Peters*), southern Mindanao (*J. G. Fischer*); Isabela (*Boulenger*); Benguet, Palawan, Laguna (*Bureau of Science collection*). Widely distributed throughout India, southern China, the Malay Peninsula and Archipelago

- $\delta^3$ . Internasal not bordering the nostril.

- $c^4$ . Scales in 15 rows. . . . . Genus *Hemibungarus*

- $\delta^4$ . Two anterior temporals, 6 upper labials. Nearly black above, with narrow, white cross-bars, red beneath, with black bars.

*Hemibungarus calligaster* (Wiegmann).

Manila (*Jan*, Wiegmann); Daraga, Mount Isarog (*Peters*); Albay (*Peters*, *Boulenger*); Bataan Province (*F. Muller*); southern Mindanao (*J. G. Fischer*); Rizal, Polillo, Laguna (*Bureau of Science collection*). Occurs only in the Philippines.

- $\delta^5$ . No anterior temporals; the parietal touching the sixth labial; 7 upper labials. Black above, with a yellowish collar on the neck; barred with red and black below. . . . . *Hemibungarus collaris* (Schlegel)

Manila (*Jan*); Philippines (*Boulenger*) Found only in the Philippines

- $c^5$ . Scales in 13 rows. . . . . Genus *Doliophis*.

- $\delta^6$ . Diameter of eye much more than one-half the distance of the eye from the mouth. Dark brown above with 2 white longitudinal stripes.

*Doliophis bilineatus* (Peters).

Palawan (*Peters*); Palawan, Balabac, Mindanao (*Boulenger*); Palawan (*Bureau of Science collection*). Found only in the Philippines.

- $\delta^7$ . Eye half as long as its distance from the mouth. Dark brown on the back and sides, crossed by narrow white bars, which widen on the ventral surface, the remainder of the ventral surface black.

*Doliophis philippinus* (Günther)

Southern Mindanao (*A. B. Meyer*), Manila (*Bureau of Science collection*) Restricted to the Philippines

## Family AMBLYCEPHALIDÆ.

No median (mental) groove beneath the chin; body compressed; maxillary bone very short, with 5 subequal teeth; head very distinct from neck; eye large, with vertical pupil; scales smooth, oblique, without pits, in 13 rows; subcaudals single (unpaired).

Light brown. Easily distinguished by the small, deep, almost cubical head, which is very distinct from the neck..... *Haplopetura boa* (Boie).

Southern Mindanao (*J. G. Fischer*); Palawan and Balabac (*Boulenger*); Iwahig, Palawan (*Bureau of Science collection*). Found also in Pinang, Borneo, Java, and the Moluccas.

## Family VIPERIDÆ.

Maxilla very short, capable of being erected, and bearing only a pair of large, hollow, poison fangs.

## Subfamily CROTALINÆ.

A deep pit between the eye and the nostril. Head large, distinct from neck, triangular.

Only one genus is found in the Philippines. Most of these snakes are arboreal and are protectively colored. Their bite is dangerous.... Genus *Trimeresurus*.  
a. Tall prehensile.

b. Scales between the eyes smooth.

c. Ventrals 145 to 175; supraocular narrow; nasals in contact, or separated by 1 or 2 scales. Dark green above, with a yellow streak along the outer row of scales on each side of the body.

*Trimeresurus gramineus* (Shaw).

Paracale (*Peters*); southern Mindanao (*J. G. Fischer*); Iwahig, Palawan (*Bureau of Science collection*). Found in all parts of south-eastern Asia and the Malay Archipelago.

d. Ventrals 170 to 187; snout prominent; supraocular narrow, 2 or 3 scales between nasals; 8 to 10 between supraoculars. Bright green above, with a yellow spot on each scale of the lateral rows.

*Trimeresurus flavomaculatus* (Gray).

Mindanao (*F. Müller, J. G. Fischer, Günther*); Luzon (*Boulenger*); Laguna Province and Batan Island (Batanes) (*Bureau of Science collection*). Occurs only in the Philippines.

e. Ventrals 180 to 191; supraocular large, 4 to 9 scales between supraoculars. Bright green, with 2 series of white spots along the back.

*Trimeresurus sumatranus* (Raffles).

Palawan (*Boulenger*). Found also in Borneo, Sumatra, and Singapore.

f. Ventrals 203; supraoculars narrow; internasals small, separated by 2 scales of similar size. Bright green, with fine black lines above; outer row of scales, canary-yellow..... *Trimeresurus schultzei* Griffin.

Iwahig, Palawan (*Bureau of Science collection*).

g. Upper head scales all strongly keeled. Bright green, with white and purple, or white and red, vertical bars on the sides. *Trimeresurus wagleri* (Boie)

Mindanao (*Gmelin, Peters, F. Müller, Günther, J. G. Fischer*); Samar (*Peters*); Palawan, Albay (*Boulenger*); Palawan (*Bureau of Science collection*).

<sup>9</sup> Tail not, or but slightly, prehensile. Red brown to blue above, bluish beneath.  
No yellow lateral stripe. Tail colored like the body.

**Trineresurus halieus** Griffin.

Polillo (Bureau of Science collection). Known only from this locality.

#### DOUBTFUL SPECIES.

*Tropidonotus dorsalis* Gunther is classified by Boulenger<sup>9</sup> as *Pseudonodon dorsalis* (Gunther). The genus is limited to China and southern India. The reference of a specimen of this species to Manila seems doubtful.<sup>10</sup>

*Tropidonotus* aff. *hypomelas* Gunther<sup>11</sup> is probably *Natrix dendrophiops* (Gunther).

*Leptophis vertebralis* Duméril et Bibron, from Luzon,<sup>12</sup> is probably a *Natrix*, which it is not possible to place more definitely at the present time.

*Naja naja* (Linnæus) var. *sputatrix* Boie, listed as from Mindanao by F. Müller<sup>13</sup> should probably be *Naja naja* var. *mirolepis* Boulenger.

There is some mistake in referring<sup>14</sup> *Piesogaster boettgeri* Seoane to Panay and Polloc.<sup>15</sup> Boulenger<sup>16</sup> includes this species under *Epicrates inornatus* (Reinhardt) and gives Jamaica, Santo Domingo, and Porto Rico as the localities in which it occurs, making no mention of Panay and Mindanao.

<sup>9</sup> Cat. Snakes, Brit. Mus. (1893), 1, 271.

<sup>10</sup> F. Müller, I. Nachtr. Cat. Herp., Samml. Basel Mus. (1880), 31.

<sup>11</sup> F. Müller, III. Nachtr. Cat. Herp., Samml. Basel Mus. (1883), 15.

<sup>12</sup> Duméril et Bibron, *Erpétologie gén.* (1854), 7, 543.

<sup>13</sup> F. Müller, III. Nachtr. Cat. Herp., Samml. Basel Mus. (1883), 18.

<sup>14</sup> Seoane, *Abhandl. Senck. Ges.* (1880), 12, 217. Pl. 1.

<sup>15</sup> Boettger, O., *Ber. Senck. Ges.* (1886), 115.

<sup>16</sup> Cat. Snakes, Brit. Mus. (1893), 1, 97.

## ILLUSTRATIONS.

---

### TEXT FIGURES.

- FIG. 1. Head of *Dendrelaphis caruleatus* Griffin. (Drawing by Espinosa.)
2. Upper figure; vertebra with a hypapophysis projecting from the lower side of the centrum. Lower figure: vertebra without hypapophysis. (From Boulenger.)

## REVIEWS.

---

**The First Grammar of the Language Spoken by the Bontoc Igorot with a Vocabulary and Texts, etc.** By Dr. Carl Wilhelm Seidenadel. Price \$5. Chicago, The Open Court Publishing Company, 1909. (Date of publication: April 1910.)

This grammar of a hitherto unexplored dialect spoken far up in the mountain fastnesses of northern Luzon can not but have come as a surprise to persons resident in the Philippine Islands and interested in the study of the vernaculars of their peoples since it originated on the opposite side of the globe, at Chicago, in the heart of the United States of America. The explanation is, perhaps, in more than one sense, characteristic of the new order of things.

The bulk of hitherto existing grammars and vocabularies on Philippine languages is made up of more or less time-honored works written by Spanish friars to whom the study of these languages was of immediate practical interest. It is characteristic of these works, especially of the older "Artes y Bocabularios," products of years of linguistic study and practice among the natives, that they existed often for a considerable time only in manuscript form, and thus were copied and passed on from colleague to colleague and from one generation of missionaries to another, until, after many corrections and additions, they ultimately appeared in print in Manila.

Here, now, we have the work of an American philologist, Dr. Wilhelm Seidenadel, who, without leaving Chicago, his place of residence, has been in contact for not more than about six months (two and one-half months in 1906, and three and one-half months in 1907) with two successive groups of Bontoc people, who, from their mountain home in far Luzon, were sent to America for exhibition. Their presence excited in him a great interest in the strange tongue and he set himself to study it.

"The difficulties seemed at first unsurmountable, for none of those whom the author met at first understood English sufficiently well to comprehend questions or to give explanations. Thus it became necessary to force the way into their idiom by their idiom, but what had appeared, in the beginning, to be almost a misfortune proved afterwards to be a blessing: the necessity of using in the research almost exclusively their vernacular through which the investigator succeeded in gaining genuine and correct material, such as in many other Malayo-Polynesian idioms is collected from unreliable translations of the Bible, from prayerbooks, manuals for priests, reports of unphilological officials, traders, missionaries and similar sources. While the material was taken down during the

first few weeks without any definite plan, the fascinating success soon induced the author to proceed systematically. Henceforth it was his aim to elicit from the Igórot as many examples as possible, illustrative of grammatical rules already sketched, and to collect an extensive vocabulary of genuine Bontoc Igórot words. But, as a matter of no less importance, he never neglected to take down also from the Igórot's mutual conversation as many phrases as he could obtain, although the significance of most of them was quite obscure, at that first period of his research."

I take these quotations from the author's narration of the genesis of his work as given by him in the preface. To judge by the date of the latter, the writing of the grammar was finished by October 18, 1907, that is, two months after the departure of the last group of Bontoc people from Chicago. This is indeed a remarkable achievement of rare linguistic talent combining enthusiasm and perseverance in a self-imposed scientific task. The magnificent volume in which the labors of the author have found their embodiment may truly be regarded as a monument erected to these qualities by that group of American citizens who through their munificence made possible the publication of this work.

The main parts of the book are:

A collection of photographs showing, in various attitudes, individuals and groups of these representatives of the Bontoc people who went to Chicago on exhibition

An inscription to the patrons alluded to above

Preface (pp. VII-XV)

List of contents (pp. XVII-XXIV)

Part I: Grammar, with appendix on Bontoc proper names (pp. 1-270).

Part II: Vocabulary, with preface (pp. 273-475).

Part III: Texts, with preface including a section "To the memory of Matyu from Bontoc" (†Detroit Michigan, September 3, 1908) (pp. 479-583)

Addenda et Corrigenda (pp. 587-588)

In connection with the epitaph just mentioned, I may dwell here on a feature of Doctor Seidenadel's work which impresses us in different parts of the book. It is his profound humane sympathy with his Bontoc friends, a sympathy which, transcending the mere professional interest taken by a scientist in the object of his study, would seem to be—according to the dictum: "Alles Verstandnis kommt uns nur durch die Liebe"—a guarantee of the faithfulness with which he has interpreted in his grammar genuine Bontoc thought and speech.

#### THE PREFACE.

The preface, as has already been indicated, makes us acquainted with the peculiar circumstances under which the book was conceived and born. After a review of the literature already existing on Bontoc the author proceeds to give us an insight into the purpose and plan that guided him in writing his grammar. To explain the absence in it of all comparative studies, he states that he considered it his task

'to furnish material for such studies, to contribute at least a certain amount of reliable material for comparative research, which ought to be based upon the results of new, uninfluenced investigations—fieldwork—into the various idioms as spoken by the natives and not upon religious books made by missionaries and their apprentices. It were best to consider the entire field of Philippine languages as yet untouched and to begin anew to study (but not without personal sympathy with the natives!) 'jene Prachtwerke des malaischen Baustils, die philippinischen Sprachen,' . . . " Concerning the plan underlying the grammar we are told "While composing the grammar, several methods of arranging the material suggested themselves. The Author concluded—indeed not without hesitation—that it would be more convenient for students trained in the grammars of Indogermanic Languages, if he would retain, with slight modifications, the customary order of the chapters in such grammars: if he would first treat the articles, then the noun, pronoun, adjective etc., just as if the Bontoc Language would distinguish the same grammatical categories as the Indogermanic Languages. This method seemed helpful for acquiring knowledge of the idiom, but for practise the student must absolutely abandon those former conceptions of etymology and syntax which he may have gained from his previous studies of the classical or modern Germanic or Romance Languages, the sooner he can free himself completely from clinging to his former notions of the structure of a language and adapt himself to new categories of linguistic elements, the earlier he will succeed in entering into the spirit of this admirable idiom."

It appears herefrom that, while the book is primarily intended to furnish material for studies in comparative Indonesian philology, that material is presented in such a form that it is available also for those familiar only with grammars of Indogermanic languages. The grammar is thus both critical and didactic; it investigates and discusses, and it teaches and is intended to be practiced. The combination of these two tasks offers, of course, certain difficulties, and where no systematic division is instituted, the claimants of either of the two spheres of interest involved must have the good grace to make certain concessions to those of the other.

To consider first the interests of "the tradesman, the engineer, the teacher, the missionary, the official," who are given directions on page 279 how to derive practical advantage from the book, the reviewer is of the opinion that they could hardly do better than imitate the splendid example set by the author himself and use the vernacular from the very outset in talking with the natives. If, having thus acquired a smattering of the language, they begin reading the grammar, taking a suitable section day by day, and consult the book on every point of interest arising, they will certainly come to feel grateful to the author for his research work, and will be in a position fully to appreciate its merit.

#### LIST OF CONTENTS.

Both the practical student and the philologist probably will regret that the treasure of information stored in this volume has not been made somewhat easier of access. The List of Contents, as far as it refers to the grammatical part, might advantageously have been made more synoptical by preserving in it the same divisions into chapters and sections into

which the text is actually divided. Without the headings used in the text and reduced to a running enumeration of the 462 paragraphs that make up the grammar, the List of Contents makes the latter wrongly appear a mere aggregate of grammatical details, among the great mass of which any particular matter is not easily detected.

#### THE GRAMMAR.

The Grammar begins by stating by whom the Bontok language is spoken, and its territorial extension.

The author then gives a list of the symbols used by him to represent the sounds of that speech. As we become acquainted with the many indistinct, fluctuating, and interchanging sounds with which it abounds, we realize the difficulties the author had to conquer in making his way through this first barrier and must admire the conscientious and painstaking manner in which he has undertaken to present to us throughout the book the peculiar Igorot sounds according to his system. It is but a proof of this conscientiousness that he, himself, in the preface calls attention to some inconsistencies in orthography, accents, and quantity. We are told that these are but a consequence of the changing elocution of the natives for whom he did not consider himself entitled to create a normal language. This is a very sensible remark, and one that touches at the root of the controversies which arise from time to time over the proper graphic representation of several sounds occurring in all these Indonesian languages, written or unwritten. Where the speakers themselves, contemporaries in the same town or settlement, are not yet agreed, one with the other, nor each with himself, as to a definite pronunciation of their tongue, the exploring linguist would indeed commit a mistake in covering up the existing unstableness by fixing a normal spelling for himself. There is one statement in the author's description of Bontok Igorot sounds upon which some comment may be useful as it relates to an apparent divergence of views found among some authors on Indonesian languages. Under the heading diphthongs, the author states: "All diphthongs are vocalic with a final consonantal sound *y* or *u*." Regarding the class of diphthongs here implied, a similar remark is often met with, namely, that the second part of the combination contains something consonantal, or is a consonant. To explain this sound the two symbols, *y* (in Dutch *j*) and *u* are referred to. It would certainly promote a clearer understanding if, instead of two ambiguous letters the pronunciation of which varies with different nationalities, a physiological description of this consonantal something were given. What is to be understood here by "consonant"? Is it, in the etymological sense, a sound which, more or less indistinct to the ear if alone, only *sounds together* with a vowel? This would be nothing more than the ordinary character of the second



part of the diphthongal combination here discussed, so that, once called *diphthongs*, it would be understood that the first part of the combination carries the syllable while the second part is reduced so as to give just a margin of different vocalic color to the first, *remaining, however, vocalic to the end*. The reviewer, for his part, has not been able to detect more than this in the mouth of Filipinos of different tribes whom he has asked to pronounce those diphthongs, nor can he find it in the examples by which the author illustrates some of the Bontok Igorot diphthongs:

"*ay* nearly like *ai* in aisle

"*ey* nearly like *ey* in eye, or *ei* in height

"*oy* as in boy."

But by the term "consonant," used in the case alluded to, more may be meant. That term is also defined as denoting, in the precise case here under discussion, a sound in the production of which that narrowing between lip and lip, and between tongue and palate, which is necessary for the articulation of *u* and *i* respectively is carried to the degree of becoming an obstruction to the passage of the breath, thus producing that rubbing sound which is characteristic of the class of consonants involved (spirants or fricatives) and in which the vocalic element becomes extinguished. To this class belongs the sound contained in certain French words cited by the author to illustrate the following diphthongs:

"*oy* as in French *feuille*,

"*uy* as in French *feuille*,

"*üy* as in French *tuyau*."

As regards the group "*ao, au*, as in *how*" it would seem that as long as the lips in pronouncing the second part of the combination remain sufficiently open to make a fluctuation between *o* and *u* at all noticeable it is not probable that the narrowing required for the labial spirant is reached; neither is it reached in the English word "*how*" used as example.

After a detailed exposition of Bontok Igorot phonology the author proceeds to treat consecutively: the Article, Noun, Pronoun, Adjective, Verb, Numerals, Prepositions, Adverbial Expressions, Particles, Conjunctions, etc. In so doing he amply fulfills his promise in the preface, to assist the student in all possible ways on each page of the grammar by establishing rules, by an abundance of examples and by frequent literal translations not only into English, but, wherever considered more helpful, into German, French, Spanish, and Latin. As, at the same time, he dwells upon and explains in their finer shades the turns of Igorot phraseology, the student, in advancing, also becomes initiated into the spirit and rules of syntax, so that, when the last part of speech is reached, there remain to be considered only a few special syntactical constructions. Chapters like *Modifiers of Verbs* (p. 117-130), *Auxiliaries Constructed*

with Ligature *ay* (p. 130-131), Modifying Verbs (p. 134-138), Negatives (p. 138-148), which are among the most interesting of the book, show clearly how profoundly the author has penetrated the intimacy of Igorot speech notwithstanding the short time allowed him for its practical study. The grammar in general convinces us that the material, in the first place, has been collected with great care and diligence, and afterward very studiously arranged so as to present it to the student as one systematic whole.

It is in connection with this latter point, namely, the systematization given by the author to his matter, that I wish here to take up and extend a little the remarks made at the beginning on the formation of Philippine grammars in the past.

Since it has been recognized that every language carries its order in itself, it is a just demand that this natural methodical disposition of its several parts be made the basis upon which the structure of any language, or group of closely related languages, be presented in a grammar. In the older Philippine grammars, those written by Spanish friars, we find this principle generally not carried out, either because it had not yet been established clearly and universally at that time, or because any attempt to evolve a natural system or order was subordinated to the practical purpose of instructing the younger members of those religious corporations in a manner then considered most adapted to their previous schooling in Latin. The fact is that Latin furnished the model for these Indonesian languages. Latin grammatical categories, by more or less specious interpretation of the native forms, were also found in Tagalog, Pampanga, Pangasinan, etc. As far as concerns the interest of the vernaculars, and not that of the students, the procedure was clearly recognized as improper, at least by some authors. Thus P. Francisco Lopez, the excellent Ilocanist, says, "Aunque el idioma de estas lenguas es muy diferente de el de la lengua latina, con todo eso, en cuanto fuere posible, nos conformaremos con el método de el Arte de Antonio de Nebrija, por ser el por donde los mas de los Religiosos que vienen á estas Islas han estudiado el latin. Y así hallarán mas claridad y facilidad en aprender esta lengua." But the evil produced, the obscuration of the genuine character of these languages, makes itself felt till to day, both in the Philippines and outside, and the condemnation in Doctor Seidenadel's Bontok Grammar of a particular "fallacy"—of which more presently merits the more attention as he is a classicist himself. How ill adapted Latin as a grammatical taskmaster for an Indonesian language really is, may be gathered from an extract of what may be called a summary of the shortcomings of Austronesian languages if tested upon the presence in them of grammatical forms characteristic of inflectional languages, as given by Doctor Codrington in his classical work on the Melanesian languages: "These languages, all of them, are destitute of inflexions, and this gives them a common character. There are, therefore, no Declensions or Conjugations there are no Cases, no Genders, and, excepting Pronouns, there is no Number or Person. Since, then, these grammatical forms do not exist, it is unreasonable and undesirable to speak of them as if existing . . . Corresponding with the absence of inflexion there is an absence of those variations in the form of words which may distinguish the Parts of Speech. It is not that there is a complete absence of such special

<sup>1</sup> Gramática ilocana, compuesta por el P. Predicador Fr. Francisco Lopez . . . Third edition. Malabon (1895) p. XIII (First edition 1627.)

forms as Verb or Noun, but that the same word, without any change of form, may be in use as almost any of the parts of Speech. The use of the word, not its form, commonly declares its character . . . ."

The first among Spanish grammarians to depart from the traditional Latin observance was probably P. Toribio Minguella. For the use of other than Latin-bred students he published in 1578 a Tagalog grammar which, perhaps on account of its being an attempt in a new direction, he modestly called "*Ensayo de gramatica hispano-tagala*." In this work he endeavors to do more justice to the language itself. Besides fitting the grammar for practical use by giving exercises and matter for reading and translating, he guides himself, in presenting the structure of the language, more by its own forms, and introduces certain terms denoting grammatical categories under discussion of their definition and their applicability to Tagalog.

As was seen in a previous quotation from Doctor Seidenadel's preface, the proper arrangement of his material has been with him likewise a matter of consideration. Consulting in this respect the convenience of students trained in Indogermanic languages, he decided to adhere, with slight modifications, to the customary order observed in those grammars, designating that order, however, as one applied to his grammar only "as if the Bontoc language would distinguish the same grammatical categories as the Indogermanic languages." We are, then, not at liberty to look upon the order followed by the author as representing his views on the proper systematic presentation of an Indonesian language such as Bontoc Igorot; but we are also absolved for the same reason, from giving consideration to that hypothetical plan from this point of view.

Still, as already indicated above, at one point of his chosen plan the author makes a strong criticism of the views held by a number of Indonesian philologists concerning certain classes of derivatives particularly characteristic of Philippine languages, and since the reviewer is completely in accord with the negative part of the author's contention, and believes that the time has come for a revision of prevailing views involved, he extracts here some of the paragraphs in Doctor Seidenadel's grammar which bear directly on the matter.

212. If roots shall be formed into Nomina actionis, they receive (after certain phonetic changes [220]) one of these verbalizing particles:

- I. the suffix *-en* (but no prefix)
- II. The suffix *-an* (but no prefix)
- III. the prefix *i-* (but no suffix)

213. By combination with one of these particles the root is transformed into an Active Verbal Noun. The particles indicate that the action named by the root passes from the agent to an object. They give the Active Verbal Noun transitive force.

216. Since the Nomen Actionis possesses active force—as has become evident through many various experiments with the spoken language—the relations of the direct object or accusative, in our conception, to the Nomen Actionis with *-en* is: (a) Either the object of the Nom. act. is in the accusative; it is governed by the Nom. Act. which has its transitive force in the suffix *-en*. If we represent this transitive force of

\*The Melanesian Languages by R. H. Codrington, D. D. Oxford 1855, pp. 101-102. The judgment quoted may appear somewhat severe; as a remedy against the belief in the universality of Latin categories, it is certainly wholesome.

-*en* by our verbs "to affect," or "to concern" or "to influence," we obtain this translation:

*leytjenmi tjaitja*: our liking concerns them.<sup>3</sup> (b) Or the object is in the predicative nominative; the transitive force of -*en* may be indicated by words like "aim," "object":

*alaentako nan tolfeg*: our taking-object (is): the key

217. The relation of the object to the Nomen actionis with suffix -*en* is analogous to the construction mentioned in [216], if we assume the possibility that -*en* is probably identical with -*acn*, or merely a variation of -*en*, in this combination with Nom. actionis. The following theory seems to be more plausible: -*en* is the locative particle, as affixed to substantives in [56-58]. The object is the place where the action named by the Active Nom. act. "takes place", to which it tends; it is the end of the action. We can translate:

*ayakantako nan aliwidtako* our calling-end (is): the man<sup>4</sup>

218. The relation of the object to Nomina actionis with the prefix *i-* appears to be the same as that to Nom. Act. with -*en*; *i-* performs here a similar function as -*en* does there; *i-* directs the action towards the aim, the object.

(*i-* may be compared with our prefix *be-* in bespeak, befall; or it may represent the preposition *is*, and may then be compared with invade, offend, persuade, provide, and other prepositional compounds.)

In certain cases *i-* points to a person in whose behalf another acts, and to the tool which a person uses in performing or executing that which the Nom. act. names;

*itafongko nan soklongna* my hiding affects his hat. The discussion of the constructions in the examples of -*en*, -*an*, *i-* Verbs given [216-218] was attempted for the purpose of facilitating translation and re-translation and with the assumption that there were in Bontoc Igorot cases of the substantive, distinctions between nominative and accusative, which do, in fact, no exist; the Bontoc Igorot does not distinguish between Casus rectus and obliquus.

Later, on page 95, the author returns incidentally to the subject under the heading Future Passive:

The imperative [of the Passive] does not exist; any theoretical forms and any experimentative use of them in sentences were unexceptionally denied; "Because you cannot tell a man what shall be done to him" . . . (But the misnamed "Three Passives" (the "Genus Relativum", my Active "Possessive Verbs") were put in the Imperative without hesitation; this shows also that the -*en*, -*an*, *i-* verbs are conceived to be Active Nomina Agentis.)<sup>5</sup>

To the parenthetical clause of paragraph 218 above quoted the following is added as a footnote:

However convenient for minds trained, to some extent, in Latin, the Doctrine of the Three Passives has appeared, centuries ago, to its inventor, and however credulously his disciples clung to this perverse interpretation of the Active Verbal Noun (Nom. actionis) in Tagalog and in the dialects of several other tribes—in the Bontoc Igorot Language the Verbal Noun is certainly not passive, but active in its character.

<sup>3</sup> Here as in the paragraphs following I give only one of several examples. For diacritical marks used with Bontok words, compare the original. (Rev.)

<sup>4</sup> "Man" is but a lapsus for "our friend" (Rev.)

<sup>5</sup> Agentis ? (Rev.)

If a passive is wanted, there is one on hand, in all times and moods of Igorot (265-276): prefix *ma-* + root + personal endings. Experiments with the Igorot by means of their own vernacular (but not through interpreters) proved indisputably their correct consciousness of an active and a passive idea.

The fact that the Three Passives Fallacy has been propagated in good faith for about two centuries and is still indefatigably copied and republished and taught, shows (as also other factors do) how necessary it is to revise and to compare the "Artes" of time-honored "authorities" and the entire material of sacred books, catechisms, confessionals, prayerbooks, with the living dialects spoken by the natives. The result of such future careful investigations into the people's vernacular, the collection of tales and songs in the unbiased dialects of the different tribes ought to be most welcome to Comparative Philologists who seem to rely only on the unreliable material at hand, *faute de mieux*, material collected by unphilological compilers, with a few admirable exceptions, such as Totanes, Minguela.

The unfelicitous term of the Three Passives (which may have sprung from its originator's inability to distinguish between the Gerundium and the Gerundivum) was employed unscrupulously in many grammars and learned articles and papers on various Philippine dialects, Bontoc Igorot excepted. The Three Passives and their alleged application occur, for instance, in . . . [follows a list of 25 authors, titles of books, and some comment].

#### THE VOCABULARY.

The vocabulary contains some 2,000 English catch-words, each of which either is given one or more Igorot equivalents or is treated as a theme developed into a summary of Igorot expressions for identical and related ideas, always, however, with sharp discrimination between words indigenous to the people and those borrowed from outside. "Verbs are given first in the Present Active in their most common form (not special form); the other "principal parts" follow: Preterite—Passive Participle in Present—Nomen agentis. Personal Verbs are found in Present and Preterite only."<sup>6</sup> The basic form, the stem-word, of derivatives, for which comparative philologists probably will look first, is not given. The reason for this perhaps may be found in some remarks made by the author in the preface to the vocabulary: "Is it necessary to warn against using my Vocabulary any one who would, without having studied and practiced the Grammar, attempt to derive any benefit from the Vocabulary? . . . The student of the Bontoc Grammar can easily construct and supply the missing forms. The Author thinks he could do the same; but he does not intend to depart from his principle: to write down only what he has heard and as he has heard it."

#### THE TEXTS.

A large amount of Bontoc Igorot "Text" is found scattered throughout the grammar in the shape of phrases taken down by the author from the Igorots' mutual conversation, and used by him as examples for illustrating

<sup>6</sup> Page 279 (Preface to the Vocabulary).

points of grammar and syntax. These phrases constitute very valuable material for gaining an insight into that "language" which springs from the mouth of the people as they work in their fields, attend to their domestic affairs, go to war or chide, scorn, laugh among themselves, etc. It is precisely because, from the intelligent use made by the author of such phrases, we can form a judgment as to the considerable insight gained by him into the spirit of the language, that we wish he had given them in the coherent form of some animated conversation among individuals of the tribe. Could any other kind of "text" reflect more truly the live speech of the people, or disclose more clearly the temperament of the speakers? By this remark I certainly do not wish to detract in the least from the great merit of the collection of folk-lore that forms the third part of Doctor Seidenadel's work and which also contains examples of spirited conversation.

These texts, eleven in number, are:

1. LUMAWIG, an extremely interesting and probably the most important story of Bontok folk-lore, beginning with an account of how the (Bontok) world was created and the Great Flood caused by two brothers, sons of Lumawig; how the latter bade the sole survivors, a brother and sister, located on top of Pokis Mountain, to marry, ordering his dog and the deer to furnish them the fire, etc.<sup>1</sup>

2. HEADHUNTERS' RETURN AND CEREMONIES.

3. THE IGOROT IN THE BATTLE OF CALO/OGAN; a narration of the part taken by a number of Bontok men in the action between the American and Filipino forces at Calocuan, near Manila, on February 10, 1899.

4. THE RAT AND THE TWO BROTHERS; a graceful legend telling of the gratitude of a rat, whose life had been spared by the younger of two brothers. The rat makes presents to them both and the younger of the two, by a cunning exchange gets possession of a magic spoon and pestle which when put into a pot will fill it with meat and rice.

5. THE STARS; a spiey little tale, illustrating the quick-witted inventiveness and satirical vein of the people who explain in it the origin of the Iloko tax-collectors of Spanish times.

6. TILIN; the metamorphosis of a girl into a rice-bird (tilin) as a warning to parents who begrudge their children a liberal measure of food.

7. KOLLINO, and

8. THE MONKEY, two more metamorphoses of children, as a warning to parents who are too severe or neglectful.

9. PALPALAMA AND PALPALAKING; another story pointing a moral for greedy people.

10. VARIA.

11. SONGS; containing many words and phrases belonging to a "Song Dialect", words "of the old folks", of forgotten or obscure meaning, which are of the greatest interest to ethnologists and philologists.

Doctor Seidenadel has the merit of having overcome unusual difficulties to enrich our knowledge of Philippine languages by a work containing comprehensive and exhaustive information on the hitherto unexplored,

<sup>1</sup> Vaguely similar traditions exist in Ifugao folk-lore.

or at best very superficially known language of a people of northern Luzon, who upon the downfall of Spanish sovereignty were taken charge of by the American Government as crude head-hunters, and are now being prepared for entrance into the comity of their civilized brother-tribes. The compilation of an exhaustive grammar, ample vocabulary, and representative collection of texts of their language is certainly a means to bring them nearer our understanding, and to promote the task just indicated. To comparative Indonesian philology the complete representation of a member of the so-called Igorot dialects has always been a desideratum; thanks to Doctor Seidenadel this is now fulfilled and his work is already being drawn upon in furtherance of such studies.

In the interest of the linguistic exploration of the Philippine Islands it is to be hoped that Doctor Seidenadel will continue dedicating his eminent talent to a task already so greatly furthered by him.

OTTO SCHIEBERER.

**Allin's Standard English-Visayan Dictionary.** By Benjamin Casey Allin, government surveyor working in the Province of Cebu, Philippine Islands. Cloth. Pp. 260. Falek's Printing House, Cebu, Cebu, P. I.

This is a handy little volume designed for the use of Filipinos who are learning English and of English speaking persons who are learning Bisaya.

As there is no Bisaya-English section it could not be used by a person who had no knowledge of English.

It contains over 5,000 English words listed alphabetically in the first column. The second column contains the same words spelled phonetically, the third abbreviations indicating whether the word is a substantive, verb, preposition, etc., and the fourth the definitions in Bisaya.

It is not quite clear why the compiler states that the letter "V" is "used only in introduced Spanish words" and yet spells the name of the language "Visayan" instead of Bisaya. There is also a good deal of difference of opinion as to the wisdom of representing by "aw" the final sound ordinarily represented by "ao." This sound in other countries where the languages are being written phonetically is represented by "au." To many this seems more nearly to represent the sound and it certainly would have the advantage, if adopted, of bringing Philippine philologists into conformity with other students of the languages of the east.

There are many typographical errors in the book but probably none of them so important as to interfere seriously with its usefulness.

One who has some knowledge of Bisaya or a considerable knowledge of English ought to find the Dictionary useful.

M. L. M.